



# The ALKALOIDAL CLINIC

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## YELLOW FEVER.

BY WILLIAM F. WAUGH, M. D.

*Emeritus Professor of the Practice of Medicine, Illinois Medical College.*

**Y**ELLOW FEVER is a disease of tropical America and Africa. Its habitat is the West Indies and the coasts of the Gulf of Mexico and the Caribbean Sea. In Cuba, for four centuries the principal focus of the disease, it has been extinguished since the American occupation. Measures are being taken to accomplish the same task in Vera Cruz; and it is with a reasonable expectation that this fever will have been eradicated from the Western hemisphere within a few years. Its limits in Africa are yet to be established. It has been a disease of the seacoast, rarely ascending beyond tidewater or above 1,000 feet above the sea level; it has prevailed especially in cities where the sanitary conditions favored epidemics; and its season has been, like typhoid, the close of the heated term. Frost puts an end to the epidemics, and to the patients.

The investigations made by Finlay, Reed, and others in Cuba, have satisfactorily proved that yellow fever is transmitted from man to man only through the medium of a mosquito, the *Stegomyia*. Experiments carried out under the observation of physicians who

doubted this show that persons just arriving from northern countries like Norway, and specially liable to this disease, sleeping in clothes taken from dead yellow fever patients and soiled with black vomit and dejecta, did not contract the infection if the mosquitoes were excluded. Contagion has always been denied; the fomites theory has been finally disproved. If there is any other mode by which the infection can be transmitted it has yet to be shown and every suggestion yet made in that direction has been disproved. For an epidemic to arise in any city now free from yellow fever it is necessary that a patient suffering with that disease shall be brought to it, that the *Stegomyia* shall have access to the patient and bite him, and after an interval of twelve days obtain access to and bite other non-immune persons. If the original patient imported is protected from the mosquitoes there is no danger to nurses or to the town. Persons who stay at night within the protection of mosquito nets are safe even if the malady rages in their neighborhood.

This explains the accurate observations of the older physicians, who noted

that those who lived on the heights around Rio de Janeiro were safe unless they ventured down into the city after night, when the *Stegomyia* is most active; and that ships anchoring at least half a mile from the shore were safe—the mosquito does not travel so far in pursuit of her victims. Frost stops the epidemic and the mosquitoes at the same time. Both prevail in the autumn.

Yellow fever may be produced by inoculating persons not immune with the blood of infected patients. The incubation then extends over a period of 41 hours to 5 days and 17 hours. Guiteras thinks the disease is continued through light, unrecognized cases occurring in the children of the lower classes, the mixed breeds.

Immunity does not endure for life; though if the patient has once had the disease a second attack is exceedingly unlikely if he remains in the tropics. But if he removes to a non-tropical country and remains some years he "loses his acclimatization," and is liable to another attack. This is the old observation, not yet tested under the mosquito infection theory. When we know more of the mosquito and of the life history of the germ that causes the fever we may be able to explain these things better.

But as yet the germ which undoubtedly exists has not been definitely recognized.

*Anatomy.*—There are no specific internal lesions which have been established. The skin is yellow; ecchymoses in the skin; free hemoglobin in the blood; heart sometimes fatty; stomach hyperemic, containing the black vomit, which consists mainly of blood pigment; swelling of glands, especially the cervi-

cal, axillary and mesenteric; liver pale or brownish yellow, its cells fatty; kidneys show diffuse nephritis, the epithelium of the convoluted tubes swollen and granular.

*Symptoms.*—The onset is sudden; occurring during the night. The patient does not report but is reported by his comrades, when on a vessel. He complains of chilly sensations, but especially of headache, with aching in the back and the legs; fever that soon runs up, the skin hot and dry, the tongue coated, sometimes sore throat. There is always anorexia, sometimes nausea. Bowels constipated. The face is of a peculiar mahogany color, the eyes injected, the forehead burning hot. The eyelids and lips may be puffy. Careful inspection will often detect slight jaundice. The fever may reach 105° F. on the first day; and this is the danger point. In the writer's cases all died who exceeded this temperature. There is little variation, except in mild cases where the fever does not run as high, and relaxes toward the second evening. About the third day the fever falls, sometimes pretty rapidly, at others slowly, and for one, two or three days there is a period of calm. This may be a complete intermission, or in mild cases even the end of the attack. Usually, however, after this comes a reactive phase, in which the fever rises, the stomach is more intensely irritated than during the first period, and there may be failure of renal action. The skin may then become intensely yellow, and this may herald the onset of this stage. In bad cases there is little remission, the fever remains high through it, and the stomach weak or nauseated. The older writers considered this a disease with one paroxysm, the



Constipation is the main cause of appendicitis, undoubtedly; the bowels of the pregnant woman should be kept freely open.—H. C. Coe.

Osler confessed that at Johns Hopkins a patient had been treated for rheumatism at three admissions before tophi were found.—M. N.

returning fever being like the typhoid of cholera, a result of the attack, rather than a stage of the malady.

The pulse is relatively low, about 100 on the first day, falling before the fever does, or even while it is still rising. During the remission it may fall to 30. This slow pulse with a rising temperature is significant of yellow fever.

Albuminuria is also significant, appearing by the third day, and occurring even in mild cases. In bad cases the urine may turn solid when boiled in the test tube. Tube casts are present in large numbers. The suppression of urine may be total. In one case there had been no secretion for two days, till a pint of champagne restored it.

The jaundice may not appear until after death.

The stomach is irritable from the first. The food is vomited, then a mucus known as "white vomit," and the black vomit may not occur till relapse, or on the second or third day of the attack. It consists of blood altered by the gastric juice. Ejected on a sheet it leaves a deposit like a filtrate, the colorless fluid sinking into the linen. Ecchymoses, petechiæ and mucous hemorrhages may signify the degree to which the blood has been disorganized. The older writers looked upon black vomit as necessarily fatal, as being due to decomposition. While it is a bad omen it is not always fatal. The blood passes through the bowels also, appearing as tarry stools. Constipation is extreme, the stools being absent rather than retained, and not acholic.

There is sometimes active delirium, but usually the patient is quiet, not so much stupid as desirous of remaining quiet on account of the headache.

Guiteras found his cases peculiarly alert, from the fear inspired by the disease. Suppression of urine causes hallucinations and may end in coma. These with the aching of the bones prevent sleep.

During an epidemic, cases of such mildness occur that they would not be recognized as such were it not for the prevalence. On the other hand malignant forms occur in which the patient may die in a few hours.

Convalescence may be marked by abscesses, parotid suppuration, and diarrhea. In one of the writer's cases bulbar paralysis followed. In another hemiparesis followed, with a peculiar mobile state of the mental faculties both of which gradually wore away but were still evident ten years later. But in the vast majority there are no sequences; the disease runs its course to recovery or the grave in a week; and people in infected cities aver that they would rather have yellow fever and recover than have a bad cold.

*Diagnosis.*—When the two coincide in prevalence it is impossible to diagnose between mild cases. In well marked cases of yellow fever, the peculiar mahogany flush of the face, the slowing pulse with a rising temperature, and the presence of albuminuria before the end of the third day, are in Guiteras' opinion sufficient to distinguish this from all other fevers. Add to this the irritability of the stomach and following black vomit, the jaundice, and the intense headache with clear intellect, and the picture is unique. There is not the intense bone-ache of dengue, and the mortality is enormously greater.

There is a form of malarial fever so similar to yellow fever that the former has received the title, malarial yellow

Thirty years ago Meynert attributed epilepsy to the accumulation of a toxic substance of a proteid nature.—Kemp, *Med. News*.

The convulsive element is very prominent among the various autotoxins developed in the intestinal canal.—Kemp, *Med. News*.

fever. It is frequent in the Gulf coast cities, and under the name of Chagres fever has been and is destined to become still more notorious. Guiteras says jaundice occurs earlier in true yellow fever, but the older observers claimed it was exactly the opposite. The mahogany face of yellow fever is absent, also the albuminuria and the excruciating headache. Hemorrhages and black vomit are rare, and the spleen is much enlarged in malarial forms, not in true yellow fever. Hematuria is common in malaria; there may be a history of that affection; and the examination of the blood reveals the small ring-shaped organisms. The curative power of quinine is altogether wanting in yellow fever.

The mortality ranges from 15 to 85 per cent. It is worse in the case of persons coming from the north to the tropics, and the farther north their origin, the greater their danger. Users of alcohol are in greatest danger of infection and if attacked are most certain to die. Dissipation, preëxistent disease, all that lowers vitality, increases the gravity of the malady. A temperature ever so little above 105° F. was fatal in the writer's cases. The albuminuria is a fair indication of the gravity of the case; suppression of urine is most dangerous. Delirium and convulsions or coma depending on this cause are ominous, but sometimes they are due to fear and less significant. Black vomit is, if not a fatal indication, very close to it. Continuance of high fever into the remittent stage is bad. The negro is less liable to the disease, and less likely to die of it; and this partial immunity extends to mixed breeds.

*Prophylaxis.*—Persons who must visit or remain in places where yellow fever

is prevailing may escape it by observing a few simple rules:

Keep indoors at night, in apartments well screened and destroy the mosquitoes that may be inside; the *Stegomyia* being more active at night.

In a city like Rio de Janeiro, it is safe to live on the heights surrounding the city and only venture down into the flats during the day.

Avoid alcohol and sexual excess, both of which are notorious for rendering the victim liable to attacks of yellow fever.

Persons ill with this fever must be carefully screened so as to prevent the access of mosquitoes that would thereby become infected and transmit the disease to other persons.

Municipal hygiene should assume the task of exterminating the mosquito by draining the swamps in which it breeds. But every barrel of rain water about a house offers a breeding place; every puddle that lasts long enough for the development of the embryos. The thorough policing that was given to Havana by the Americans vastly improved the health of the city and diminished the death rate, but did not quench yellow fever, until the mosquito theory led to the use of screens, etc. By the application of this theory, this city, long the plague spot of the continent, has been entirely freed from this pest for over two years, and rendered one of the healthiest large cities in the world. It is essential that this should be fully apprehended, that no more lives may be sacrificed to combat facts fully established. Putting a city in good hygienic condition will vastly improve its health and lessen the hold any epidemic will obtain; but to prevent infection by yel-



The studies of Ceni on epilepsy also demonstrate that it is of autogenous origin, and not bacterial in its nature.—Kemp.

It would seem that certain cases of epilepsy at least must have as their source autoinfection from the gastrointestinal tract.—Kemp.



low fever it is necessary to apply this mosquito theory.

*Treatment.*—Put the patient in bed, cover with blankets, encourage sweating, and keep the stomach absolutely empty. There is no possibility of food being digested when the stomach is so disorganized, and every attempt to feed increases the vomiting and tends to induce black vomit. Give enema to wash out the colon, and then small warm enemas of milk, soup or salt solution, to nourish and to flush the kidneys. Be it remembered that this fever is over in a very few days, and that the patient will not starve if he gets no food for this time; further, that he can not digest food put in his stomach anyhow; and if these facts secure entrance into the consciousness of the attendants the patient's life will possibly be saved from useless and perilous attempts to feed him.

Sternberg advised corrosive sublimate in doses of gr. 1-128, every hour as an antiseptic, with soda for its antacid effect. The writer is doubtful of the applicability of the antiseptic method here, his observations of yellow fever not having shown that autotoxemia had that large part in the symptoms it displays in fevers of longer duration; but his experience has made him exceedingly nervous over anything that may provoke vomiting. The best results have followed absolute rest to this organ. In one case not a drop of water even, was permitted to enter it in seventeen days, with recovery.

Good results have been reported from hypodermics of pilocarpine, gr. 1-6, repeated if necessary to induce sweating. It is in line with the common consensus of opinion among the older observers as to the value of sweating.

Since the dead line seems to be the temperature of 105° F., it would seem that here was the chosen field for the use of hydrotherapy; but in all the trials made under the writer's knowledge it has failed. Others have reported good results, however, and it is at least worthy of extended trial. Yet it must not be overlooked that the frosts that stop the further progress of the epidemic also kill off the patients then down with it.

The stomach may be quieted by hypodermics of cocaine or morphine over the epigastrium, or by mustard on the neck over the pneumogastric—more effective than over the epigastrium. Ice over the nerve is also effective.

The best remedy for dangerous hemorrhage is a hypodermic of atropine, enough to redden the skin. But this should not be used if the fever is high; and a pretty free hemorrhage is possibly useful. If it is an evidence of disintegration of the blood, no hemostatic could do good.

Strychnine hypodermics may be required to sustain the vitality.

Burggraave quotes Vera's treatment approvingly. During the first period the diet is limited to acidulated drinks; bloodletting may be requisite; emetine, clearing the bowels with sweet almond oil with lemon juice; tepid baths and cold compresses to the forehead, vinegar to the back and limbs; emollient enemas; alcohol has not given good results. In the second period he gives acid drinks, ice, water ices, beef or veal soup. In the third period he employs tonics and antispasmodics—verbena has been lauded, possibly a parasiticide. But this does not touch the true nature of the disease. Burggraave advises beginning



Wm. H. Thompson secured brilliant results with the cure of epileptics from treatment of the gastrointestinal tract.—Kemp.

Epilepsy: Intestinal antiseptics, regulate bowels, suit diet and medication to stomach, avoid red meats, bromide for habit.—Thompson.

with saline, following with strychnine, hyoscyamine and morphine, to calm lumboabdominal pains and vomiting; fomentations to the head for excessive heat; then the defervescent, two or three granules each of aconitine and digitalin,

every hour till resolution and diuresis; in the third period quinine hydroferrocyanide to prevent new accesses. As soon as possible get to a reconstituent regimen, with quassin and soda arsenate. Chicago, Illinois.



### PULMONARY TUBERCULOSIS: A CLINICAL STUDY.\*

BY WILLIAM PORTER, M. D.

#### II.

THE next patient that comes before us is one in which *diarrhea* is a prominent symptom.

CASE III. A woman of thirty-two, housewife, whose sister died of pulmonary tuberculosis five years ago, had the first noticeable symptoms a year ago. They were, as nearly as she can remember, a persistent cough with some expectoration and loss of flesh. Slight hemorrhage followed some unusual exertion six months ago and diarrhea began two months later. Before this she had been of constipated habit, but now the diarrhea is constant. The feces are semi-liquid, not formed, containing portions of undigested food, a little blood, very dark, and the odor is most offensive. There has been tenderness and distention over the abdomen and sometimes acute pain.

On examination the usual evidence of well-advanced tuberculosis are found in the left lung at the apex and scattered points of infiltration throughout. The expectoration is free and copious. Do not forget this in the study of the intestinal condition. Bacilli in great numbers

are found in every part of the sputum. Fever is present every afternoon and in keeping with this, the microscope shows, in addition to the bacilli, both streptococci and staphylococci. The case is one of primary pulmonary tuberculosis, with the added intestinal complication.

Let us study these symptoms and their sequences for a little while. There has been the possibility of infection from the sister, who died. The left lung was evidently the initial site of infection, and if we may judge from the stage at the apex, the first deposit was there. Rapid disintegration followed as shown by hemorrhage, free expectoration, and rapid loss of flesh. So far there was no sign of intestinal involvement except constipation. I beg you to make a note of this exception. I will refer to it again, but keep it in mind. After the symptoms usually found with pulmonary advance were well established, evidences of tubercular disease of the bowels were manifest. It is this complication that I wish to speak of particularly in discussing this case.

The constipation already mentioned is not uncommon in patients of sedentary habit or where the muscular system has become weakened, but in tubercular cases it is often an index of what fol-

\*A series of lectures delivered in the Medical Department of the St. Louis University, Senior Course, 1904-1905.



The revulsion against surgery is shown by the tendency to treat even adenoids by hygienic and medicinal methods.

Frank (*Muench. med. Wochenschr.*) cured a case of ulcer of the leg of five years' standing with balsam peru.

lowed in this case. Accumulation in the intestine favored distention and loss of contractile power in the bowel. This is important in itself, but of great importance where there is free throwing off of pus, broken down tissue and germs and germ products from the lung. It is scarcely possible that all of this will be expectorated; some of it will, either mixed with food or by itself, find its way into the alimentary canal. It is not much changed by the devitalized conditions in the stomach and finds its way into the intestinal tract. Here it finds opportunity for lodgment among the retained scybalous masses, often in the ascending colon. The masses may be found there in the majority of constipated cases and point to what I believe to be a most important therapeutic suggestion.

When these retained fecal masses become the lodging places for germs and ptomains, a new complication arises. It has been proven that bacilli may be and are formed here and it is no far cry to the conclusion that reabsorption of tubercular products from the intestine have much to do with the afternoon fevers of the consumptive. It may be objected that there are other microorganisms responsible for the febrile conditions. Be it so, these too are often with the bacilli in intestinal retention and their causative relation to increased afternoon temperature in no way alters the value of the suggestion. Should this not be accepted as proven it cannot but be admitted that the diarrhea which so often follows constipation in tubercular cases is due to the local irritation of accumulations of *materies morbi* as have been described. The retained microorganisms may not be the only factors in the production of the diarrhea for im-

paired secretions, deficient digestion and consequent fermentation of food has much to do with it, but the former should not be overlooked. Please bear this in mind when we come to speak of treatment in these cases.

CASE IV. In this case the *fever* is the one symptom among others that attracts attention. The patient is a girl of twenty-one, belonging to the decade when tuberculosis is most frequent and to the class which runs a most rapid course. This girl can give us no history applicable in developing causation. None of her family has had tuberculosis nor has she ever been associated with a consumptive. She has always lived at home with nothing whatever to suggest a tubercular tendency or predisposition.

Eight months ago she began to cough and soon after to expectorate freely. The loss of flesh has been very rapid and every function is impaired. The menstrual flow ceased six or seven months ago. Her fever has been reaching 102° F. every afternoon for at least two weeks and it is possible that it has existed much longer. The physical examination shows marked evidences of invasion at the right apex. There is flatness, limited movement, dulness, absence of vesicular murmur and crepitation. At the second intercostal space there is an amphoric sound.

Microscopically the picture is characteristic: Tubercle bacilli, streptococci and staphylococci are in every field, while there are many clumps of the micrococcus tetragenus. (The exact value or potency of the latter organism has never been determined to my satisfaction, and I wish some of you young gentlemen would make this a subject for special investigation.)



Rand (*Amer. Med.*) secured immediate relief in the algid stage of intermittent fever with amyl nitrite. Try glonoin.

Pedigo (*Gaillard's Southern Medicine*) gives his pneumonia cases 40 to 50 grains of calomel at a dose.

In this case as in the early history of the preceding one, there is constipation.

The persistence and generally high range of fever in so many of our cases of tuberculosis is a subject worthy of the best thought. In almost all other fever of pus-poisoning the temperature, though high, is generally irregular both as to range and recurrence. Here we have a fever which is often regular as to period and range yet unaffected by almost all the remedies used for their antifebrile potency. Such as do apparently modify the fever seem to do so by their depressing effects rather than as specifics, hence are harmful and valueless. Reasoning from analogy I believe there is a close relationship between the fever and the intestinal conditions described in the last case. I think, when we come to speak of the treatment of the fever of tuberculosis, that you will be convinced that its cause is partly at least, within our reach, and that if it cannot be controlled it may be greatly modified.

CASE V. A man of 27, of large frame, somewhat emaciated and hectic. A printer by trade, though he has not worked at the case for several years. His habits have been fairly good and there has never been an instance of consumption in his family. Some years ago a journeyman printer in the same room had tuberculosis, but they were never close together either in or out of the house. A year and a half ago he began coughing. Loss of flesh was noticed in a few months and copious expectoration. His appetite continued good till recently. There is a little afternoon fever, not affected by the many remedies vaunted for the purpose. It now runs about 100° F., sometimes preceded by a slight chill. The usual physical signs are here: want of

symmetry in shape and movement, a partial fixation at the left apex, crepitation, dulness, and little or no vesicular murmur, tell the tale too plainly.

While there is nothing extraordinary in the history or examination, there is one symptom that is prominent in this case and that is the *night sweat*. You will find cases in which this seemingly unimportant symptom is so aggravated, so distressing, that it becomes the burden of the tale of woe which you hear and hear in vain.

Let us, forgetting all else in this case, look into the symptom a little. The night sweat not only comes on every night, but comes at a regular hour. In this case as in most instances it is after the first long sound sleep, about 3 a. m. The time may vary, but it is generally after a deep sleep. I believe it is the result of a vasomotor relaxation, a lessening of the tension of the vessel nerve fibrillae, a consequent stasis in the venules and capillaries, an exudation and passing out of the watery constituents of the blood. As strengthening this hypotheses, it is not infrequent that we find other evidences of sympathetic irritation, interrupted heart action, gastric inability and intestinal distention. Without wishing to anticipate what may be a part of the therapeutics of tuberculosis let me say that whatever may be used to increase vasomotor contractility or as a bridge to stimulate nerve function till the period of depression is over, is likely to be of use.

CASE V. This case resembles in many ways the one we have just seen. Of almost the same age and with the same indefinite history of causation, the length of time since the first symptoms appeared and the rapidity of progress are about

Pedigo considers calomel an intestinal antiseptic. If so, why not try something milder in pneumonia—sulphocarbolates?

Don't forget that intestinal antiseptics are an important part of the treatment of pneumonia.

equal. This man is twenty-seven years old, a harness maker. Family history good, except that his relatives whom he never saw died of tuberculosis. A year ago he had a slight hemorrhage and subsequently the usual hemorrhage appeared. The marked depression at the right apex, the comparative dulness there, and as those of you who may listen can testify, the crepitation and increased fremitus, readily indicate the site of disease. The assistants report that the sputum has bacilli and streptococci in great numbers. Passing rapidly over these evidences let me in this case call your attention to one marked complication, *the feeble heart*.

While it is true that tuberculosis, or consumption as it is better known in the latter stages, is essentially a disease of the lungs, yet its influence on other vital organs must be estimated and met. I have tried to illustrate this in speaking of intestinal fault and in inefficient nerve function. This is also true of the cardiac function in many cases of tuberculosis. The wasting in the disease affects all of muscular tissue and none more so than the heart muscle. Cardiac incompetency would be more manifest in these cases were it not that the loss of flesh and vessel resistance lessen the demand upon the heart. All this, while in the average case, the heart is growing weaker and in many of the more chronic cases is becoming not only weaker but smaller. Did you ever hold the pulse of a dying consumptive? How like heart failure! In fact, it is heart failure in many cases—just as it is in fevers when you try to stimulate, or in shock or peritonitis. Whatever may be the disease the patient dies at last, not from “want of breath,” but from the running down of the heart

action—a consequent stasis possibly in the lung; an edema of the extremities; a termination from cardiac rather than from pulmonary fault. Doubtless your statement, were I to interrogate you as to the methods of relief in such cases would be, “It is too late, the heart failure is only a part of the general systemic failure.” True, but what if we had anticipated, had foreseen and guarded against this very contingency?

As we examine this man more closely in reference to this factor in his case, we find symmetrical edema of the feet and legs. Were it one sided it would indicate pressure or fault below the vessel bifurcature. The urine contains some albumin; the area of liver dulness is increased; the spleen is somewhat enlarged; and in the posterior pulmonary regions there is partial dulness and diminished muscular murmur. The pulse is feeble and a beat is missed now and then, or rather is so weak that it can scarcely be felt. The heart sounds are feeble even through the thin thoracic wall. The systole is incomplete with only partial emptying of the ventricle. Whatever else there may be, and there is plenty elsewhere, the man is dying of heart failure. I wish to make this emphatic for it suggests most important therapeutic action, to which I shall ask your earnest thought, when we come to it.

CASE VII. There is another interesting class of patients of which this patient is an illustration. It is a case of *bronchopneumonia* with tubercular infection. A young man of twenty-three, a carpenter, habits good, family history good and no known opportunity for infection. Ten months ago he was exposed to sudden change in the weather, “caught cold,” and from his own recital there is

Also don't forget that it is not everything. Secure vasomotor equilibrium with the triad and defervescent.

Treating the nose, avoid high-tension sprays and douches; white petroleum oil is a good vehicle.—W. S. Bryant.



little doubt but that he had a severe attack of bronchopneumonia. Both lungs were involved. It did not run a typical course, there were several intermissions and recurrences and while at the end of eighteen or twenty days he was much better, the cough continued with some expectoration and little gain in weight or strength. It appears that an examination of the sputum was made early in the pneumonia attack but no bacilli found. Since his admission into the hospital a few bacilli have appeared. On examination we find exaggerated respiratory sounds at the right apex and slightly-increased resonance. At the left base there is dulness, a little crepitation, diminished murmur and some pain in deep inspiration. The apex is clear as is also the right base. He has little fever, a fair appetite and sleeps well except for the cough.

This case is fortunate and unfortunate. He is fortunate in that the whole area of inflammatory deposit is not due to tubercular infection. He is unfortunate because there is a slight specific invasion in the slowly-yielding infiltration. Very many of our cases begin this way. A pneumonia, either lobar or lobular, slow convalescence, the inflammatory deposit undergoing chronic change, fatty or caseous, the protective epithelium not fully restored and then the unfortunate reception and colonization of the bacilli. These cases are always interesting and the history most important. Could it always be full and correct we could often make our diagnosis more positive. In these patients with chronic pneumonia and recent invasion of the bacilli, it is always important to lessen the amount of infiltration as quickly as possible because of the tendency to tubercular infection.

Each diseased lobule is an invitation to the bacillus—each restored lobule is an aid in resistance. When we come to study the treatment of these cases I shall ask you to remember that your efforts should be early directed to getting the lung back to normal conditions before the tubercular invasion is complete. Another thought in this connection is that in all cases of pneumonia, the physician should continue his care until the evidences of infiltration have disappeared.

CASE VIII. The case I now present is a most interesting exception to the usual class. This man is thirty-six years old and has been a boatman and more recently a fireman for a stationary engine. One sister died from tuberculosis fifteen years ago and a brother two years after. Eighteen months ago he began to cough but paid little attention to it. One night he had a chill, the next day high fever and was in bed with a "bad cold" (pneumonia?) for three weeks. After he was able to go to work his cough continued and his expectoration was copious. Other symptoms: loss of flesh and strength, small, recurrent hemorrhages, and afternoon fever came on. He went to Arizona for a while, but drifted back and was brought to the hospital a week ago.

The physical examination shows marked change at the right apex, loss of movement, dulness, crepitation and small amphoric sounds—one at the second intercostal space, and one more distinct lower down. The man is very weak; he has a temperature at three p. m. of 102° F., and some swelling of both feet. The interesting fact is that after repeated examination *not a single bacillus* can be found. I am unable to account for this and have seen but one other case



Adenoids: Menthol and eucalyptol 1 to 2 per cent in white petroleum oil; avoid excess and eliminate surgery.—Bryant.

Stem the tide of agnosticism; avoid alcohol, arsenic, lead, acetanilid, and toxins; be wary of coal-tars.—Brower.

like it—under the care of Surgeon Major Bannister at the Jefferson Barracks. This latter case I have mentioned in a report to the National Association for the Study and Prevention of Tuberculosis and I thought it unique.

In connection with this report let me remind you that the number of bacilli is not an indication of either the stage or rapidity of progress in pulmonary tuberculosis. Often you will find the far-advanced cases have few bacilli, and conversely that cases in the very early stages

may show the bacilli in great numbers. More than this, you may find that the number vary in the same patient from week to week. This leads to another thought. If you find bacilli in the sputum you can make a positive diagnosis. If you do not withhold your decision until after repeated examinations you can venture a negative. Do not do this, however, if the physical symptoms and the history are suggestive lest you stumble upon a case like this one before you. St. Louis, Missouri.



### GASTROENTERITIS.\*

BY MAMIE A. COVENY, M. D.

**G**ASTROENTERITIS is a very prevalent disease, particularly so between the middle of June and the middle of September, increasing in severity with an increase of heat and humidity. Babies artificially fed are more prone to gastric and intestinal disturbances than babies nursed by the mother.

It is estimated that one-third of all infants die before they reach the age of three years and one of the chief causes of infant mortality is unwholesome milk. The great danger to infants is the fact that milk is their necessary and often only food. Improper or excessive feeding acting upon the delicate digestive organs, may cause diarrhea even where there are no toxicogenic microorganisms present.

A small quantity of some indigestible substance in the intestines increases peristaltic action and leads to frequent stools. Stomachic digestion in young children is of less importance than intestinal diges-

tion, the stomach being more of a receptacle in which the milk is stored and coagulated than for digestive purposes. Consequently we have the most favorable condition for the growth of bacteria introduced with the food. The younger the child the greater the danger, as in young children the milk is nearly if not quite all digested in the small intestine, and this explains why indigestion in the infant induces diarrhea.

In the study of gastroenteritis we might also speak of "enterocolitis," as it is often impossible to divide these diseases into strict anatomical regions. Practicians who have this class of cases to deal with know that often the whole digestive tract is involved from esophagus downward, with more or less intensity, that stomach, small and large intestines alike are involved, regardless of their anatomical divisions. When once inflammatory changes are established in the alimentary canal not only the channel itself but the accessory organs are

\*Read at the meeting of the Tri-State Medical Society, Burlington, Ia., June, 1905.



Flatfoot is often weakfoot. Excess in weight will be supported by the foot structures if their strength develops in proportion.—Ashley.

The relations of flatfoot to locomotor ataxia deserve attention; mistakes in diagnosis occur; may be causal.—Brower.

also involved, as the liver and pancreas, and their digestive fluids. The glands of both stomach and bowels are invaded and their secretions changed, both in reaction and chemical characteristics. When the normal juices of the stomach have become chemically changed they are then unable to digest the food intrusted to them and an abnormal ferment is established in which pyogenic bacteria develop and become active agents. Putrefaction exists, putrefactive poisons are absorbed and destroy the utility of all with which they come in contact. After a time the mucous membrane becomes involved, with thickening of different coats of the bowel, and ulceration results. If this course is allowed to go on, and the child survives, the condition is difficult to cure and runs a chronic course, leads to frequent acute attacks and may be present for years and prevent the proper development of the child, often persisting through life.

In the study of these cases we will for convenience make a few classifications. We have three principal classes of infant diarrheas: acute gastroenteritis; chronic gastroenteritis; and the acute and subacute gastroenterites, or milk infection.

We will first consider acute gastroenteritis, or mechanical diarrhea. The number of this class of cases is large. Diarrhea usually begins in children who are teething, and the old notion that frequent stools are beneficial during teething leads to neglect of these conditions, and infant mortality has been greatly increased through this neglect. The physician often is not consulted until the condition becomes alarming from bacterial infection or the disease becomes chronic.

The prompt recognition and treatment of acute intestinal indigestion are the most valuable prophylactic measures against the more serious intestinal disorders.

Excessive feeding is a frequent cause of intestinal diarrhea. Children artificially fed are more liable to be overfed than are babies nursed by the mother, the child often being given the bottle by the busy mother to quiet it. Babies are fed if they are fussy; mothers seldom think to give them water when it is often from thirst they fret. They are fed if they are colicky—are often fed when already too full. Thus is more food added to an already full stomach. The unloading of the stomach throws upon the already overtaxed digestive organs increased work. The undigested matters act as foreign bodies producing peristalsis and diarrhea.

Another pernicious habit is giving the child a taste of various things on the table. The mother's milk contains all the nourishment required by the child at this period, and should the baby be fortunate enough to have a mother who can and will lay aside all social obligations and the precedents established by many of her fashionable friends, and who will devote herself to caring for her baby, the baby will usually receive its normal allowance of nourishment from its natural source and its chances through the heated period and that of teething will be much better than that of the baby artificially fed. Babies not so favored must take their chances with hosts of others artificially fed, but their chances should be increased by giving them food as nearly as possible like the mother's milk. And often the knowledge of the most intelligent physician is taxed to the limit.



Ashley recommends for flatfoot a brace to be used and thrown away when it has done its good work.

The legitimate advertiser supplies weapons for the physician's use; the other asks us to use a secret "patent."

Restlessness, flatulence, abdominal pain and vomiting, are the first symptoms complained of. Frequency of bowel movement is accompanied by griping pain, stools gradually becoming watery, sometimes green. Elevation of temperature is not common in this form of gastroenteritis, or is only transient. Thirst is great with frequent stools. This form is not of itself fatal, but may become so by passing into the chronic stage, or by invasion of bacteria. The treatment should be prompt, no food should be given until the bowels are thoroughly cleaned out, and vomiting stopped. Castor oil or calomel should be given. Each case must be governed by the condition of the stomach and the severity of the symptoms. All solid food must be withheld for several days. Thirst should be relieved by plenty of sterile water, cold unless it produces vomiting. Rice water, hot or cold, with salt is usually well borne. Bismuth subnitrate, 2 to 5 grains, may be given every two to three hours after the bowels have been thoroughly moved. The bowels should be irrigated once or twice daily, depending upon the severity of the symptoms. If the case is seen early this treatment suffices. Remove the cause and the patient gets well, but great care should be exercised in feeding the child for a time, and the nourishment best suited to the individual case must be selected.

Then we have the chronic gastroenteritis which is generally the result of the neglected acute attack. The undigested food ferments and the products of fermentation act upon the sensitive mucous membrane, inducing a catarrhal condition most marked in the ileum and colon. Ulceration frequently results. This may occur without the aid of any

toxicogenic germs. This catarrhal form may occur at any period of the year but becomes more serious during the hot months, when toxicogenic germs abound, and the chances of invasion are greatly increased. The disease, as the more acute form, is more common in children artificially fed and is more common among children suffering from disease either inherited or acquired. Neglected children suffering from exposure and cold are more prone to this disease.

The symptoms are: frequent bowel movements; the child is nervous and fretful, does not sleep well; the bowels are distended, the movements semisolid, may be constipated or watery, varying from time to time; the stools are very offensive, odor putrid, milk curds present. As the disease progresses, mucus appears, hardened masses covered with mucus and blood. With watery stools we have increased pain, fever and vomiting. This condition may continue for weeks, some days better with constant relapses. Emaciation is rapid. Children do not often die from exhaustion or from the intercurrent of milk infection. The whole bowel becomes weakened and prolapsus ani is common. The parts being so relaxed the replaced bowel is not retained, and becomes swollen and inflamed. The skin with which the discharges come in contact is highly inflamed and excoriated. The extremities are cold, requiring artificial heat. A subnormal temperature for days is an alarming symptom, usually followed by death. We may have structural changes in the kidneys with albuminuria.

The treatment in these cases as in the former would be to withhold all food and clean out the bowel; this is where we must use castor oil, nothing acts so



Reilly advocated lupulin as a safe and efficient mild hypnotic and anodyne. Dose from a scruple upward.

Formic acid in too large doses causes irritation, vertigo, spasms, rise of temperature, albuminuria and hematuria.—Stern.

well. Then give the little patient rice water, white of egg, mutton broth, and brandy; nourish him and stimulate without giving any solid food. Any overfeeding will increase the trouble and in this disease the casein in the milk acts upon the ulcers as a foreign body, increasing the trouble. Pure, fresh air should be chief among our remedies. The bismuth preparations should be used, with colon irrigation and boric acid or normal salt solution, once or twice daily. Where there is tenesmus with quantities of mucus, tincture of opium should be injected in small quantities after irrigation, for the effect upon the lower bowel.

Then we have the acute milk infection. It is from this source we have our greatest infant mortality. This diarrhea is produced by toxicogenic bacteria, not a specific organism but one or more of a large class may be present and produce the symptoms. There are usually bacteria present in the small intestine, chief among which is the *bacterium coli commune*. The contents of the intestines in summer diarrhea of children swarm with bacteria of many species, many of which produce powerful poisons.

The bacteria multiply outside of the body and are disseminated widely and abundantly in high temperatures, this being the cause of their prevalence during the heated summer months. The most suitable culture medium for the growth of the bacteria is milk, and it is in milk that they constantly find their way into the intestines of the child. The toxicogenic germs grow and multiply in milk, both before and after it has been taken into the alimentary canal of the child, and elaborate chemical poisons

which induce diarrhea and other untoward symptoms. The number of these poisons is as great as the bacteria which produce them. All are gastrointestinal irritants. Tyrotoxin is chief among them and is a most potent poison, inducing severe and continual vomiting, with purging and speedy loss of vitality.

This is the acute milk infection, and is not as frequent as the milder types. It never occurs in children exclusively nursed. Choleric diarrhea never occurs excepting during the heated months of summer, when the poison-producing germs are most abundant. They may be abundant enough in milk to produce the symptoms of poisoning in a very short time. Or most of the poison may be generated by the growth of bacteria in the alimentary canal producing ptomain poisons which are rapidly absorbed.

The symptoms are sudden; constant vomiting and purging, extreme pallor; eyes sunken; stools copious, watery, at last consisting almost entirely of serum. The odor is characteristic, offensive and musty. Cold perspiration. The little one may feel cool with a temperature ranging from 102° to 104° F. It may reach 107° F. The respiration is shallow and rapid. If nearing a fatal termination stupor or convulsions.

Prompt action is required, same as if the alimentary canal were to be emptied of any poison. Any temporizing results in the loss of the little patient. Not a drop of milk must be given, neither from the mother or sterilized. Wash out the stomach and bowels; the stomach with normal salt solution, the bowels with boric acid. One gallon should be used so as to reach every fold in the colon. After the bowel is irrigated one pint of cool water with from fifteen to thirty



Formic acid in rheumatism is only useful when given with citric acid; useless in myalgia, good locally in diphtheria.—Stern.

Cancer: Formic acid, by stomach, hypo and applied locally; also with x-ray, used freely to limit of toleration.—Stern.



grains tannic acid should be injected to precipitate the poisons remaining. Irrigation of the bowel should be repeated as soon as purging and vomiting returns. Calomel should be given in one grain doses to clean out the small intestines. As soon as vomiting is allayed, stimulants are administered, brandy or whisky in sterilized iced water, and normal salt solutions retained to relieve thirst. Everything about the little patient must be sterilized, the nurse being most particular about her hands or the child will be reinfected. The patient must be relieved at once or death results.

Last we have the subacute milk infection, which is also produced by the poisons generated by the growth and multiplication of bacteria. We have this form when the sudden changes of temperature come in August. There are greater variations in the symptoms of subacute infection. The symptoms are much the same, only not so severe or violent. And there is not the danger of sudden prostration and death.

The same rule holds good for all classes of cases. Clean out the alimentary canal and keep it clean. Castor oil and calomel will do this for us. Castor oil will thoroughly empty the canal. Calomel in small doses will keep it so and also act upon the liver, favoring the flow of bile. Wash out bowels with normal salt solution and allow it to be absorbed.

Vomiting and inflammation are relieved in all cases by spice poultices kept constantly on the stomach and bowels. The temperature is relieved by sponging and the ice bag to the head and heat to the feet. All food must be removed and withheld. Albumen water may be given freely after vomiting ceases; brandy, rice wa-

ter and mutton broth may also be given. Never return to milk within two or three days and in many cases longer. The bismuth preparations and dilute hydrochloric acid are beneficial. After the bowels are cleared out and vomiting stops, small doses of tincture of opium or rhubarb may be given.

In conclusion, I would like to emphasize particularly the great importance of proper feeding for babies. Mothers should nurse them when possible. If not, be sure you are feeding them sterile milk. Do not let the child have fruits that are beginning to be stale. Do not give anything that will interfere with the digestion of the infant and be careful to guard against sudden atmospheric changes, when the cool, damp August evenings arrive. Always make a careful diagnosis. The physician who differentiates between the acute and chronic gastroenteritis and the acute and subacute milk infection and treats each individually will be the one who will cure most of his cases.

Clinton, Iowa.

#### DISCUSSION.

DR. C. F. WAHRER.—Few affections that a person is called upon to treat present a more painstaking task to him than gastroenteritis and kindred diseases of the gastrointestinal tract of the infant in its first eighteen months. And in no class of disease can he use prescribed rules for treatment less than he can in these puzzling affections. Heredity, environment, age, teething, sources of food and the preparation and keeping thereof, the nursing, and many more features enter into the treatment and management of these cases. Dr. Coveny's paper is in the right track and no one



Formic acid is an efficient intestinal antiseptic; also internal antiseptic for autotoxemia, says Heinrich Stern.

Formic acid is a useful remedy for syphilis, internally and locally applied, and by hypo; for gummata.—Heinrich Stern.

can read it without benefit. She emphasizes the individual treatment of each case and the care to be given each one. I fear many physicians do *not* give these small sufferers, valuable as they are to their parents, the same amount of care they would give an adult, somehow thinking it does not matter so much if one of the little ones dies, especially if they are of humble parentage, as though the patient were a judge or general, or governor, or some society leader or other important leader in society.

In fact I am very certain if the same care were taken, that we take in treating some adult of distinction, or their child, we should have greater success than we do. Though we cannot formulate exact rules as the essayist hinted at, yet certain features must enter into

all of the treatment of this condition.

1. The regulation and restoration of the diet. I am sure most of these patients are overfed.

2. The quality and source of the diet, as bad food comes next to being worse than no food at all.

3. The hygiene of the child's surroundings, and this is sometimes not amenable to change, especially among the very poor and ignorant and careless.

4. The proper selection of medicines but remembering not to put too much trust in drugs alone.

When these few details are observed, we can trust the attendant with the care of the child, however sick, for if he will observe this much he will do more, and is proof that he has his cases well in hand.



## THE BUSINESS PHASE.

BY W. J. BOGART, M. D.

THIS question which has a direct bearing on the relationship of the professional man to his fellows merits separate consideration. The assumption of absolute superiority and distinctness so manifest in professional bearing is causatively related to many of the complications and worries of these occupations. By professions I refer to those learned vocations which, consciously or not, sway mankind. I include those followings which have as their excuse for being, a profound scientific hold on life principles. Law, Medicine, and Theology, with possibly some others, readily fall within the classification. They should embrace and exemplify the principles underlying all human concepts.

This brings us to our first or subject proposition: *Professional life is or should be typical business life—business idealized.* The old fallacy that business and professional work are incompatible is easily disproven. All life is activity, resultant upon simple or compound molecular motion. All activity is business. Therefore, all mental or physical operations are business operations. This reduces the subject to the broad fundamental meaning of business. The above proposition being assured, professional life is readily seen to occupy the highest position in business life. Now we are able to determine that the professional man is *relatively* superior rather than absolutely. His vocation represents the acme of business development; all other



Tuberculosis: Formic acid is the best remedy yet tested for the chronic ulcerative and fibroid forms.—Heinrich Stern.

Pneumonia: Uncomfortable air, hot or cold, has never yet been proved to be useful in this malady.—E. F. Wells.

occupations are gradient thereto. Mental acumen and cultivation constitute the difference between a Spencer and a coal-heaver. Any opposing argument bearing on muscular development is inapplicable. It matters not whether the before-mentioned requisites are preponderantly inherent or acquired from previously slightly developed germinals. Nor does this statement militate in the least against the honor of "inferior" positions, for no man has conceived his forbears.

Thus we are lead to the evolvment of these bases underlying all business and all life. If all occupations are business, the same few business rules underlie all human activity, and such are as surely reducible to a handful of principles, as are mechanics to the seven laws or the universe to the four gases. These business axioms are represented by the following sub-propositions. It will appear that I necessarily explain a single proposition before introducing the succeeding one, owing to their sequential nature.

*Any intercourse is an exchange of values.* While this is apparent from the practical point of view it may be denied in its relation to ethics and reason. It holds just as true, however, in all ramifications of activity. If we praise one, it is for that one's good, or our own gratulation. So with sympathy and all the other mental attributes. We get our exchange value from introspection, if not otherwise. It is a natural law admitting of no exception that all things have a price and the price must be paid. As the professional man has nothing but values to exchange for values, his of necessity falls within this pale of business life.

*All human activity is impelled by the law of self-preservation.* This proposition may appear degrading, but is not for the reason that we cannot transcend self, and therefore all sentiments, even the noblest, must be derived from this primary selfishness. Satisfying bodily hunger is admittedly self-preservation; satisfying mental or spiritual hunger is as assuredly such. All mental, moral and physical exertions are in response to some personal want, radiate from the self-preserving principle and are reducible to it. The incidental fact that their performance frequently benefits other individuals, differentiates the noble from the ignoble impulses. The deduction is obvious from the foregoing that all business is founded on sentiment and all sound business on some noble sentiment. This, of course, directly opposes the old superficial aphorism of, "No sentiment in business." All inspiring acts, as personal sacrifice, are impelled by a noble emotion. True, deep business men conserve their vocations by inspiring others through the workings of this truth. Sharks demonstrate the axiomatic force of the proposition by preying upon those whom necessity forces to deal with them. These impelling forces are numerous and varied and include the domestic sentiment, patriotism, admiration, etc. The vast extent of various financial operations is dependent wholly on sentiment. While the workings of the proposition are not equally discernible in all directions, it is impossible to produce a vocation not traceable to some sentiment, gradating from the pessimism of the burglar to the glory of the artist. Even compliance to onerous rules is dependent upon the fact that eventually we do what we most want



In pneumonia, bad breath is due to local causes; rigidity of the neck to otitis media.—Wells. (Intestinal sepsis?)

Pneumonia in Children: Tinct. digitalin early; caffeine or adrenalin as indicated, with good nursing, etc.—E. F. Wells.

to do. That understanding of the phases and motives of human nature so essential to success is comprehended in the last given proposition. Such understanding may be either intuitive or empirical in those familiar instances of "self-made men" who have achieved signal success. Intuition and acquisition are both represented in modified form in the ordinary person.

The following proposition implies a censure or a regret for most of us: *It betokens the highest degree of business acumen, to so digest essential business philosophy and so master in detail one's particular vocation, that other individuals deal with you for their sakes, not yours.* This should be so apparent as to obviate illustrations which latter are amply producible from those cases wherein we deal with uncongenial individuals or firms because of their satisfactory goods. As to the practicability of this proposition, it may be objected that professional followings are not exact sciences, but I posit they are as much such as many others, the degree of exactitude depending upon our attention to fundamentals and details. Hygiene, dietetics, mechanics, chemistry and psychology are exact enough and drugs may be made more exact by specific medication. If we fail through lack of mental acumen or physical inferiority to thus adjust ourselves to our vocation we may not be blamable, but we have assuredly graded ourselves too highly in picking our occupation. The doctor does not often enough recognize his responsibility as a leader. The profession being in the lead he should faithfully fulfill his implied obligations. This can only mean the greatest and most positive mastery of the work. The pro-

fessional man should know and realize that the complete understanding of his profession is also the understanding of the principles back of all human activity, the details of each departure being worked out by adaptation.

Having thus considered the underlying philosophy of business, it naturally develops to next inquire into the details thereof. These details prove to be the generalizations of superficial reasoning. They will all be found by analytic observation to arrange themselves under one or another of the before-mentioned fundamentals. Further minute observation is possible but this fact illustrates the essential truth of final details being conceivable by adaptation alone. This being true, only those salient points will be considered which will suggest to the reader the involved minutiae. In elucidating the details that comprise a working knowledge of the above propositions, it will be seen how closely interwoven are values, sentiments and thoroughness, hence these details are discussed collectively instead of being grouped under each proposition.

While it is fundamental that honesty, real or assumed, enter into all business, yet this is included under the proposition relating to values. Honesty is the willingness to pay. Such willingness will accompany acknowledgment of the inevitable price principle. Judgment is the ability to value correctly. Promptness is the combination of judgment and honesty. Wisdom, the ability to discern opportunities and exigencies (chance) with which every life is filled, is the sum of the foregoing qualities. Wisdom buttresses judgment. As we must pay, we should pay at once, by the application of the above argument. Therefore,



The treatment of pleural effusions in children is surgical; any doctor should be ready and able to attend to this.—Wahrer.

Pleural effusions of children almost all recover when treated correctly and fearlessly.

—C. F. Wahrer, Iowa.

the only sound business basis is the pay-as-you-go method and the more nearly one's operations conform to that basis, the more nearly sound are they. This plan is altogether feasible, as evidenced by numerous gigantic business enterprises operating on a strictly cash basis. It is a safe rule that the individual who habitually asks credit is habitually living beyond his means and will habitually fail to pay. The possession of a credit "rating" should not engender abuse thereof by plunging into debt, for such credit is always dependent upon our capital, which means cash value. While it may be disputed that the cash man has no financial rating in agencies, he needs none, for the existence of rating agencies depends upon the baneful possibilities of credit, the very rating being a test of our ability to pay on demand. Thus the cash man is looked upon with suspicion by the credit man when he undertakes to depart from his usual habit of paying at once, not because he is without assets, but because his action shows a dangerous change of principle.

While it may not be foolish to secure rating for advertisement purposes, it shows a fatal tendency to not manage one's affairs so as to avoid credit by retrenching, for opening accounts beyond one's wont is overreaching, that always present peril of the credit system. The advancement of illustrations of great fortunes made by extensive credit operations is no more logical than would be the career of the occasional "faro-buster," and evidence of the legitimacy of gambling. A study of credit systems shows that a man's rating is always determined by the amount of his "quick assets," *i. e.*, cash value. Again, the apparent safety of credit under the

watchfulness of rating concerns is disproven by frequent colossal failures, and the fact that among the multitude of small debtors who have no considerable rating security, occurs the most direful results of the "trusting" system.

A popular approval of any extensive or prolonged plan of credit at any time, is but an evanescent phase of those financial cycles which succeed each other interminably; and approval to be decried in all bitterness by the populace at a succeeding panicky stage of the same cycle.

The "price" principle makes it honorable to collect. The doctor should be paid as surely as the butcher. It is poor business if the professional man does not collect. To be habitually beaten shows lack of respect for one's self and one's business. It is also wrong to pauperize a patient by doing so-called free service. The case is most exceptional where nothing can be collected, and charitable work as the term usually implies, is degrading to the client and makes the doctor an enemy to the state by inducing pauperism. Charity should consist in *overlooking* shortcomings not in *inducing* them. Communities provide for attention to the poor, and such cases should thus be paid for. It may be argued adversely that such medical service is often inferior. In that case it is the professional man's duty to see that the inferior man is replaced by one more capable. This will be more charitable than gratuitous.

I hold the possibility of credit largely responsible for these variations in supply and demand which occasion fluctuations in prosperity of either the individual or the community. While it does not always appear possible to forego "book-



"Wat 'ell cases" are really pneumonic abscesses, says Cotton; and require much care to diagnose correctly.

He that hath ears to hear let him hear—with his ears; otherwise let him use a stethoscope.—A. C. Cotton, of Chicago.



ing," the less one gives or gets credit, the more stable is his condition. When and how to collect are the minutiae to be controlled by environment. Such determinations must be the result of judgment applied to existing conditions. A thorough hold on this first sub-proposition will preclude all wild-cat and get-rich-quick schemes. Another point included under this proposition is often overlooked. A professional training costs in cash from \$1,000 to \$10,000 according to circumstances. To this should be added the profit of a probable employment, with its advancing pay, for the period involved. The sum of these amounts with ordinary interest puts the real cost of your professional entree on a capitalistic basis. This capital stock can never be withdrawn and its interest should accrue from one's services, besides ordinary pay for visits, medicine and experience. It will not always be possible to get full monetary value for services, but a recompense will assuredly be derived. It should also be borne in mind that Shylockism is no more sound business than is laxity. There is a golden mean between such extremes. These should be in ratio and bear a definite relation to current prices of commodities in general. It is always apropos to suggest that all things have, with certain variations, an intrinsic worth which is enhanced or reduced by demand.

This brings us to a practical discussion of the second sub-proposition. The sentimental scope of professional life is wider because it is the highest type of business and includes in itself all the sentiments pertaining to all other forms of business. This peculiar scope of "higher" sentiments increases the doc-

tor's duties to business instead of absolving him therefrom. All human activity being evolved from a sentimental cause, the greater one's understanding of such factors, the wider-reaching his influence. The professional man should comprehend as nearly as possible all the sentiments impelling humanity, and should practise the nobler ones. In this later category will fall optimism, patience, charity as previously defined, etc. The best psychological results are attainable only through such observance. Such suggestive terms as tact, shrewdness, personal address, etc., gain their import from their relation to the preceding argument. Such thorough knowledge of underlying motives and their visible expression constitute the consummation of reading human nature. A good face, a reputation for honesty, etc., with their antitheses, reflect a habitual belief in and practice of certain sentiments and must be taken into account in our dealings. Such familiarity with these sentiments offers acquaintance with still others, and thus breadth and depth, judgment and wisdom, are acquired. A study of successful careers develops the knowledge that they are those persons who have made most thorough study of the self-preserving principle and its correlation to human motives. Mental equipoise is dependent upon such a knowledge of the workings of fundamental sentiments. When we consider that religion, which represents the broadest and loftiest reach of human aim and intellection, is born of and sustained by the law of self-preservation, the primal nature of this proposition is manifest.

Having thus shown that all human activity is based on an interchange of



The presence of lecithin in the ovaries and testes show that it is necessary for tissues in active proliferation.—Prevost.

Lecithin takes part in the mechanism by which the body defends itself against the invasion of bacteria and toxins.—Preston Keyes.

values and that values are determined by and are dependent upon the self-conserving principle we are brought to a practical exposition of the final proposition which necessitates a knowledge of the preceding ones for a basis upon which it can be demonstrated. This proposition is dependent upon the necessity of adaptation for the mastery of details. This necessity is consequent to natural limitations of time and mentality. While I should understand the principles underlying the construction of a brick chimney, I must especially develop knowledge before I can select brick, mix mortar, etc. Therefore, we may content ourselves with the minutiae of our own vocation. In the medical work this will include every detail from the use of the mortar and pestle to the most difficult problem in diagnosing and prescribing. This will bar all make-shift or substitute work. Honesty and thoroughness demand just as high-grade medication for the laborer as for the potentate. Every man should know all the adjunctives and radiations of his business. That is the serious lack of the average specialist; he has inclined his attention preclusively to some single radiation. The man who strove merely to "pass" in college work will find himself hopelessly outstripped by him who was content with nothing less than distinction because of the latter's superior mastery of his vocation.

As to the practical features, I hold it as necessary to exercise as much skill in bandaging a cut finger as a broken jaw. Thorough mastery will include post-graduate, selected, didactic and clinical research, persistently pursued. He who thinks such a course too laborious must not object to a small portion

of success, for industry is the price required for the mastery of the last given principle.

Circumstances have forced upon me a practical acquaintance with several different vocations and I find that the same thorough recognition and mastery of details underlies success in each. Business genius may be defined as an infinite ability for universal detail work, for to fully comprehend details is to first understand principles. A prudent expenditure of time and money will follow such business perception. Energy and perseverance find full play here. Devotion to and respect for one's work are necessary. Breadth and learning will cause humility to outweigh conceit. Tact and wisdom, by anticipating the methods of one's opponents and the exigencies of trade conditions, including timeliness, are requisites. The power of initiative and of original research are essential to great success. If you live in the Ohio Valley, an especial study of malaria will enhance success. The same is true in Louisiana and of yellow fever, etc. The necessity for academic preparation varies inversely with natural astuteness. The appearance of one's person and office, the method of dispensing drugs and one's manner in so doing, habits, location, etc., all become details of our occupation. While it is true that circumstances frequently prevent the attainment of one's ideals in these matters, continual striving towards them will surely elevate one.

As to collections which are a detail of every occupation, only one rule applies. That is expressed in the old adages of "A bird in the hand," etc., and "A half a loaf," etc. This implies the prompt acceptance of all proffered payment, re-



Large amounts of lecithin existing in the ovaries and testes; it here plays the role of fixing phosphorus in the organism.—*Chasevant*.

The amboceptors that destroy invading bacteria and toxins cannot unfold their activity without the presence of lecithin.—*Prevost*.

membering that a good debtor may become a bad one through adverse circumstances and a bad one tends to become worse. If a debtor owes two dollars and offers payment of one freely, suggest payment of the balance. If it is impossible to collect the first one, ask for one-half or one-fourth of it. Keep the account alive. So long as he is paying part, it retains his respect for you and keeps him in the paying habit. In chronic cases insist on having your share of the total disbursement which is sure to follow any acquisition of such persons. Twenty years of unvarying good results in collecting in various vocations suggests the above rules. Of course you will familiarize yourself with the habits, occupations and assets of every debtor.

In conclusion it may be said that full practical exemplification of the principles included in the preceding proposition are

precluded by space limitations. Nearly all the qualities for success mentioned are acquirable, if not native. One final proof of the relative superiority of professions as laid down in the subject proposition is that the entity of other occupations is but fractional in professional work. To illustrate: The doctor knows more about farming than the farmer about medicine and knows his own business as well as the farmer understands farming, etc. The view that professional life is the acme of all activity is in no wise belittling. It being more costly to acquire the details of professions renders such occupations of necessity more valuable.

To summarize: Honesty, industry and thoroughness, supplemented by an understanding of human nature, will, I believe, lead to success in the professions as in other occupations.

Hanna, Wyoming.



## MINOR PATHOLOGIC CONDITIONS OF THE PENILE INTEGUMENT.

(PART IV.)

GENITAL PAPILLOMATA.

BY G. FRANK LYDSTON, M. D.

Professor of Genitourinary Surgery and Syphilology, State University of Illinois; Attending Surgeon, St. Mary's and Samaritan Hospitals.

**V**EGETATIONS or papillomata upon the mucous or quasimucous surfaces of the genitals in both sexes are popularly known as venereal warts. This term is a misnomer, as the growths are in no sense venereal, but due to causes entirely independent of sexual intercourse. They may be met with in persons who have never been exposed to venereal infection. They

are frequently found in pregnant women, in whom the conditions favorable for their development very often exist, particularly among the lower classes, to whom cleanliness is apparently obnoxious. The conditions that foster these papillary overgrowths resemble in many respects those essential to the development of vegetable fungi: heat, moisture, and filth, with protection from



Young animals given lecithin gain in weight 60 per cent more than control animals that do not receive lecithin.—Hatai.

Although the rate of growth is accelerated by lecithin, it is entirely a normal growth,—Prevost, *Internat. Therap.*

air and sunlight. Idiosyncrasy and local nerve perturbation are also worthy of consideration as possible etiologic factors.

In the case of fleshy vegetations upon the organs of generation there exists, in addition to the above-mentioned conditions, local irritation produced by the products of simple or specific inflammation or decomposing normal secretions. Secretions occurring about the anogenital region in uncleanly persons are prone to decomposition, and when decomposed develop irritating products that may give rise to inflammation of the mucus membrane, in balanitis or to a proliferation of the epithelial elements of the part. Gonorrhea, chancroid, chancre, balanitis, balanoposthitis, and, indeed, any affection of the genitals giving rise to irritating secretions, may result, even under the best of care, in the development of vegetations. The papillomatous growths consist of delicate, rapidly-proliferating epithelium that becomes permeated when fully developed by delicate loops of capillaries; they are therefore very friable and extremely vascular, bleeding freely upon the slightest injury. Genital papillomata may grow to an enormous size; thus, I have met with several cases in which vegetations involving the prepuce and glans grew to the size of an orange. In a case occurring in a comparatively cleanly pregnant woman who, so far as known, had never suffered from any venereal disease, the vegetations surrounded the ostium vaginae, and involved the tissues about the anus, forming a tumor not unlike a large cauliflower.

In passing, I desire to call attention to the fact that syphilis seems to bear a very important etiologic relation to

genital vegetations. Syphilitics are especially prone to their development and the papillomatous growths are seemingly very resistant to treatment in such patients. The frequency with which genital syphilides become transformed into exuberant vegetations, with a distinct and positive tendency to form connective tissue organization, is noteworthy.

*Treatment.*—The growths should be treated by excision with the knife or scissors or destruction by caustics. The danger of hemorrhage in very large growths is such that caustics are sometimes preferable to excision, although, if the surface involved is not very extensive, even these large growths may be excised and their bases seared with the actual cautery. Excellent results may sometimes be secured by injection of glacial acetic acid with the hypodermic needle. Small growths are best treated by excision with scissors, the underlying mucous membrane or skin being removed with the growth. If necessary, fine stitches may be inserted. Chromic acid is one of the best caustics for the destruction of venereal vegetations. It should, however, be cautiously used, as it will sometimes cause much more extensive destruction than desired. Good results may often be obtained by imbedding minute grains of the pure acid in the growth.

Genital papillomata will rarely occur if proper measures of cleanliness are adopted. Secretions, whether normal or morbid, should not be allowed to accumulate beneath the prepuce, and when the mucous membrane becomes irritated or the secretion excessive, astringent lotions or drying powders should be freely used. Circumcision is usually demanded. After destruction of the growths



Rats which have been fed on lecithin show a greater power of resistance to unfavorable changes in their surroundings.—Prevost.

Is cholin the cause or a result of lesions of the nervous system? It is found in the blood of nervous cases.—Prevost.

the mucous membrane should be treated for some little time by means of astringent or absorbent powders and lotions to prevent their recurrence. In the majority of cases vegetations will recur to a greater or less extent for some time in spite of treatment. They should be removed as soon as detected. Once the mucous membrane has regained its normal condition papillomata will no longer develop. Constitutional treatment is often essential in genital papillomata. Tonics, and especially arsenic, are often valuable. In cases with a specific founda-

tion, mercury and the iodides are necessary.

Certain of the rarer conditions affecting the integumentary investments of the penis come very rarely under the observation of the general practitioner, and when they do are usually referred to the specialist. Such conditions are lupus erythematosus and psoriasis.

Penile syphilides, aside from their tendency to papillomatous transformation, are essentially the same as those seen elsewhere.

Chicago, Illinois.



### ADVANTAGES TO BE DERIVED FROM THE USE OF SMALL AND FREQUENTLY-REPEATED DOSES.

BY ARCH. DIXON, M. D.

A SHORT time ago, "The Filson Club" issued its twentieth publication, which was "The History of the Medical Department of Transylvania University," by Dr. Robert Peter. This is a most interesting document and should be read by every physician who takes a pride in Kentucky medicine. What strikes one more forcibly, perhaps, than anything else in reading about this old-time institution and the old-time doctors who made it famous, is the radical change which has taken place in the practice of medicine; especially is this noticeable in the therapeutic application of remedies.

As an instance of this great change I quote the following, from the sketch of the life of Doctor John Esten Cooke, who was called to the chair of Theory and Practice of Medicine in that grand old university in 1827. Among all

these remedies calomel was the chief reliance and was given by him in doses not measured by the balance but by the effect they produced. Notably during the epidemic of cholera in Lexington, in 1833, he absolutely resorted to tablespoonful doses of this mercurial, repeated *pro re nata*, actually giving about *one pound in one day* to a young patient, and without fatal result!

Two cases may be quoted from his own paper in the *Transylvania Medical Journal* and from Dr. Lunsford Yandell's Memoir of Doctor Cooke, in the *American Practitioner*:

William Douglass, a student of theology, took a tablespoonful (about two ounces) every six hours for three days in succession, having taken the same quantity the evening before, in all thirteen tablespoonfuls. He was in collapse when he took the first dose. On the third morning after beginning this treatment his discharges were found to have become thick and green and Doctor

\*Read before the Henderson County (Kentucky) Medical Society, June 12, 1905.



Cholin, found in cerebrospinal fluid of epileptics, is capable of eliciting convulsions when injected into animals.—Donath.

Is the brain of epileptics susceptible to the toxic action of cholin because it is deficient in lecithin?—Prevost.



Cooke thought he would have recovered but for the indiscretion of his attendant, who had him to walk across a large room from one bed to another more than once. Hiccough came on, the patient became delirious and died on the sixth day. But another patient recovered about this time under similar treatment, and still lives, I believe, a useful Episcopal clergyman and an illustration of the extent to which calomel may be employed in some diseases without injury to health. Mr. Brittan, a young theological student took a tablespoonful of calomel soon after having had several watery discharges. He was advised to repeat the dose every six hours, until the watery discharges ceased. He took that day four and the next three of these doses; the discharges not ceasing until some time after the seventh dose had been taken. He took, moreover, three similar ones during the same time—having thrown up three. The repeated doses were given immediately after the regular ones were thrown up. Bilious discharges appeared on the evening of the second day, and were kept up by tincture of aloes and occasionally by pills of aloes and rhubarb for a week. The patient was somewhat salivated but recovered. I saw him a number of years afterwards in perfect health.

In those days calomel was the *sine qua non*, and other drugs were given in doses, the bare mention of which, to-day, would make us stand aghast, but calomel and the lancet were oftenest relied upon to take the trick. I mention this old-time practice (and not such an old time either, for many of the older members of the profession, now living, gave and are giving today, what are considered Gargantuan doses by some of us) for the reason that I wish to direct attention to some of the advantages to be derived from the use of small and frequently-repeated doses of medicine, in comparison with the large doses formerly used, and still used by many. To

Ringer, perhaps more than any other, we are indebted for the almost radical change which has taken place in the administration of remedies during the last two or three decades.

The subject of small and often-repeated doses is a very important one, and one regarding which it is difficult to establish any arbitrary rules. In case of chronic diseases, when it is necessary to continue the treatment for a long time, the plan of administering the medicine in larger doses and at longer intervals is perhaps the best. For instance, in the treatment of anemia, where we wish to give some preparation of iron, it would hardly be necessary to administer it oftener than three times daily. Again, in certain cases, it may be desirable to produce the full effect of the drug at a single dose, as in the administration of a cathartic, or of a single large dose of quinine to reduce the temperature of malaria.

Of course, all remedies given for a tonic effect are usually and properly exhibited at intervals of about six hours, either before or after meals, as the case may be. In many cases, however, it is desired to keep up the effect and the question arises whether we can accomplish this purpose better by giving the drugs in small doses at frequent intervals than by giving them in large doses at much longer intervals, the total quantity of the drug in the end being perhaps the same, or nearly so, in either case. It should be borne in mind that, there are certain drugs which are absorbed rapidly and produce their effect upon the system in a very short time, and they may also be eliminated very rapidly, while others act slowly and are eliminated at much longer intervals; and



The only rational explanation of the utility of phosphorus in rickets is that it aids in the elaboration of lecithin.—Prevost.

Lecithin might supplant forced alimentation in neurasthenia, tabes, tuberculosis, at least in great part.—Prevost.

while I do not intend to enter into a scientific discussion of the action of remedies, it cannot be too strongly urged that a knowledge of the physiological action of drugs is extremely essential to their proper and safe administration, still the results reached by physiologist and clinician are often at variance.

Hare says, "Rational therapeutics at the present day does not consist in a knowledge of doses and the *materia medica*, but exist as a complex art, in which knowledge and its proper appreciation, based on common-sense principles, go hand in hand." All of which I endorse.

The statements I shall make are based on clinical facts and from personal observation. First of all let it be said that though I am a firm believer in the efficacy of small and frequently-repeated doses of medicine I have no patience with therapeutic nihilism, nor am I a homeopathist. Nor, indeed, do I think it essential to use a large and varied assortment of drugs. Much better work can be accomplished by a few remedies, the physiological action and therapeutical properties of which are well known, than by the use of a larger number of which we know very little. Long ago I began the use of remedies in smaller and oftener-repeated doses than I had been taught by textbooks and in lectures. I found that aconite, three to five drops, put in one-third of a tumblerful of water and given in teaspoonful doses every fifteen minutes or half-hour, produced much better results than when given in the doses laid down in the dispensatory. Especially was this true with children. In many cases of febrile movement, with dry, hot skin, a full, bounding pulse, the mucous membrane of the throat and nose

probably dry and inflamed, aconite given in this way, often produces almost marvelous results, preparing the system for the reception of other remedies which may be indicated.

In commencing so-called cold in the head, aconite is a most useful remedy as it is also in cardiac hypertrophy with palpitation, severe headache, facial neuralgia and disturbances of the nervous system due to increased force of the heart beat. A tablet of 1-100 grain of atropine in a goblet of water, given in teaspoonful doses every fifteen minutes or half hour, is a most excellent remedy in spasmodic croup. In cases of summer diarrhea in children atropine exercises an influence altogether helpful, especially in those cases where the circulation is weak and nervous symptoms are present. In the treatment of those diseases with pronounced throat inflammation, as scarlet fever, tonsillitis, diphtheria, stomatitis, etc., chlorate of potash, an old-time remedy, given in 1-6 to 1-2 grain doses every half hour, will produce better results than when given in large doses, without the danger of the evil effects resulting from the accumulation of the drug in the system and consequent kidney and other troubles, which sometimes happens.

In obstinate cases of urticaria I have found nothing to relieve so quickly as salicylate of sodium in one-half to two-grain doses every half hour or hour. Urticaria is often produced by the administration of drugs, more frequently perhaps, by large doses of balsam of copaiba in cases of urethritis, cystitis, etc., and it may seem strange to you when I make the statement that a single drop or one-half drop of the same drug given every one-half hour will often control the intolerable itching and the symp-



Jones (*Brit. M. J.*) advises conium and strychnine for motor excitement of the insane. Translate into cicutine hydrobromate.

For pneumonia with extreme dyspnea, cyanosis, full surface veins, small radial pulse, bleed and hypo. strychnine.—Morison.

tems will disappear. I have no explanation to offer, but I make the statement upon the authority of others and personally I have often observed the efficacy of the treatment, although not so frequently as in the treatment by the salicylate of sodium. Fowler's solution, or the liquor potassii arsenitis, one-fourth drop doses every half hour for six or eight doses, will often relieve the vomiting which occurs after a debauch. It will also relieve the morning vomiting of drunkards and is of decided benefit in the sympathetic nausea and vomiting of pregnancy.

The bromides are largely used in the treatment of nervous and febrile disturbances of children, but an objection to them is the fact that little patients do not take them readily, because of the taste; the bromide of sodium is, perhaps, as little disagreeable as any of the preparations. This objection can be avoided by giving small doses frequently repeated; for instance a few grains dissolved in half a tumblerful of water, a teaspoonful representing one-half a grain, administered every fifteen minutes. When given in this manner the bromides often prove of great benefit in the nervous disturbances arising from dentition and other causes, and in relieving the fever which in children, usually attends a slight degree of excitement of any kind. A temperature which might indicate a sickness of considerable gravity in an adult, if it occur in a child may be of comparatively little importance. In such cases the bromides administered in doses such as I have indicated, every ten or fifteen minutes, will often prove of great benefit.

Children often vomit from very slight cause and are liable to suffer from diar-

rhea and vomiting which have no other cause than disturbance of digestion. One-half to drop doses of the wine of ipecac, repeated every fifteen or twenty minutes, will often produce the most marked relief, both from the nausea and vomiting and from the diarrhea as well; given in this way it creates no nausea and is easily taken. A single drop of tr. nux vomica every ten minutes will often produce most marked relief in sick headache not of a neurotic origin.

It is well known that cantharides, when given in large doses, is liable to cause inflammation of the urinary tract; but it has been found that a single drop or, even one-half drop of the tincture given every half-hour, or hour, will in many cases relieve vesical catarrh. Digitalis is another drug the administration of which, in small and oft-repeated doses, I do not hesitate to say is attended with more benefit than in larger doses at longer intervals. A drop of the tincture of digitalis, given to a patient suffering from symptoms due to organic disease of the heart, when digitalis is indicated, at intervals of half-hour to an hour, according to the severity of the symptoms, will often give greater relief than larger doses, and without liability to ill effects.

For the diarrhea of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but not true dysentery, five drops of castor oil, given every hour in water with sugar and acacia is an excellent remedy. In the treatment of orchitis and epidymitis I have found nothing affords greater relief in a short time than drop doses of tincture of pulsatilla given every one-half hour. The pain, swelling and inflammation soon subside and the patient becomes more comfortable. It is



Sprue, hill and other diarrheas yield to raw strawberries or other fruit juices, says Sir Patrick Manson.

Boyd treats gastric ulcer by absolute starvation, salines, salt solution enemas, and antiseptic mouth washes, six days.

also useful in dysmenorrhea, not of a membranous, obstructive, or neuralgic character.

In cases of amenorrhea not dependent on anemia, benefit may be derived from one drop of ergot given every half hour for five or six hours the day previous to the expected flow and again on the day it should occur. Tincture hamamelis, administered in two-drop doses every half hour, will often control hemorrhage from the nose, uterus or from hemorrhoids. Tincture belladonna in drop doses every one-half hour, is a good remedy in nasal catarrh and bronchitis accompanied by free secretion. In cases of pulmonary edema with failure of heart power, belladonna thus administered, is of benefit in retarding the exudation of serum and in overcoming the heart failure. In neuralgia about the face and head I have found gelsemium, in one or two minim doses every fifteen minutes or half hour, of decided benefit. In contrast to the enormous doses of calomel, as noted in the beginning of this paper, it will be interesting to observe the beneficial effects of that drug in exceedingly small doses. Long ago Trousseau called attention to the fact that one-sixtieth of a grain of calomel taken every hour for ten or twelve hours, will relieve the headache of syphilis occurring at night; the relief is very marked by the second or third night.

Nursing children often vomit or regurgitate their food; this has been repeatedly relieved, in my experience, by giving them a teaspoonful of a solution of one grain of calomel to the pint of water every ten or fifteen minutes; in order to dissolve it the calomel should first be put in an ounce of lime-water and then into the pint of pure water.



Waring advises grindelia for dyspnea and cough of emphysema. Try aspidospermine instead of the crude drug itself.

One twenty-fourth of a grain of mercury with chalk given every fifteen to twenty minutes is often of great benefit in the vomiting and non-inflammatory diarrhea of children. When the diarrhea is accompanied by mucous passages indicative of a certain degree of inflammatory action, or enterocolitis, benefit will be derived from the administration of one teaspoonful of a solution of bichloride of mercury, one grain to the quart of water, every hour; arsenate of copper, 1-100 grain in one-half glass of water, a teaspoonful to be given every fifteen minutes or one-half hour, is also a most excellent remedy in cases when the diarrhea is due to fermentation. In the treatment of croup I know of nothing which gives such satisfactory results as the use of iodized calcium (calcidin) in small doses, one-eighth grain every ten or fifteen minutes; this supplemented by one or two small doses, 1-200 grain, of apomorphine, will generally afford prompt relief. Pilocarpine in small and frequently-repeated doses is almost a specific in those fulminant sthenic cases of erysipelas which we so often meet; it should never be given in asthenic cases on account of its depressing effects.

I could enumerate many other remedies which have served me well in small and oft-repeated doses, but the above will probably suffice. After all it is the active principle which chemistry has taught us how to isolate, which does the work. If we wish to get the effect of opium quickly, we give morphine; of aconite, we give aconitine; of digitalis, digitalin; of nux vomica, we give strychnine, and so on. Let us hope that in the near future we shall use fewer

Watson abandons the uric acid theory of gout and commends Hutchinson's definition—toxemia of gastrointestinal origin.

drugs, and with greater wisdom, remembering, as says the *St. Louis Medical Review*, "that the practice of medicine is the practice of the healing art by all proved efficacious means of whatever kind. No mode of bringing relief to suffering humanity is, or can be excluded from the rights of any physician. Our art is *pro bono publico*, and all may—nay, must—use every known means that commends itself to them. There can, in the nature of things, be no monopolistic rights in medical practice; as a consequence no body of men licensed to practice the healing art at all can be rightly prevented by any law

from practising any known efficacious measure, whether in consonance with any particular theories they may adopt or not. They may, if they are narrow-minded enough, limit themselves, that is their responsibility. If there is anything in homeopathy every physician has a right to use it if he so wills and the same may be said of osteopathy. If there is anything in drug therapy, or surgical operations, every homeopath and osteopath, if he is fitted for a license to practise at all, has a natural right to it, not to be taken away by any restrictive clauses whatever."

Henderson, Kentucky.



### PUERPERAL INFECTION.

BY E. H. HAWKINS, M. D.

**D**URING the few short years of my professional experiences, it has been my misfortune to have to treat patients suffering from puerperal infection, and with but few exceptions these cases proved fatal. Probably there are few things in our professional lives which make a deeper or more lasting impression upon our minds than the death-bed scenes of patients dying from any cause, but more especially if the objects of our solicitude chance to be beautiful young women in the bloom of their existence, struggling for life within the grasp of puerperal infection.

No doubt, many of you, who follow general or obstetrical practice can recall, at some stage of your career, a mental picture of some poor unfortunate woman in the last throes of this disease. If so, you have seen something that will remain with you through life. Agonizing

appeals may be seen in the eyes of these suffering women, imploring the physician not to let them die, since life has just begun; the world has never looked so beautiful, nor life so desirable. The thought of leaving their loved ones is more than they can bear. And as the tears flow down their pallid cheeks they cry aloud with anguish. Later come the heartrending scenes of their demise, and the knowledge of the futility of medical assistance, for many of them at least, almost overwhelms us with sorrow, and often tries our very souls.

The dreadful fatality of the disease, the agonizing symptoms, the futility of medical assistance, in so large a majority of cases, has made an impression upon my mind that time will never efface. As the years go by, these cases fall into our hands and our efforts to save them have been accompanied with such long



During digestion sublimate, chlorine and quinine do not inhibit growth or kill *b. typhosus*, but  $H_2O$  and formalin do.—Carter.

Orr lauds Balfour's treatment of rheumatic gout—diet; arsenic and iron, and blisters; with the variants indicated.—*Practitioner*.



and trying scenes, and such fatal results, that I have come to regard the disease, as the one most to be dreaded in the long list of maladies peculiar to childbirth.

It therefore behooves us to be prepared to treat these cases in a more scientific, or at least a more satisfactory manner, than we have been able to do in the past. I find myself almost instinctively turning my thoughts to a consideration of this important subject and in this connection, I wish to present two cases:

CASE I.—Mrs. H. B., American, age 20, delicate all her life, primipara, gave birth to triplets, all girls (designated as Faith, Hope and Charity). The weight of the first born was three pounds, of the other two, four and one-half pounds each. The smallest one was found dead in its crib on the fourth day. The other two are still alive, and thriving nicely.

I shall never forget the surprise I received in this case. I delivered the smallest one first—handed it to the nurse, after severing the cord and clamping both ends of it with artery forceps. I then introduced the first two fingers of my right hand into the vagina to deliver the placenta, when I discovered a hard globular body, which proved to be the head of another child—larger than the first. I delivered it in a few minutes as the uterine contractions were good and strong. I then severed and clamped the cord, as before, and handed the child to the nurse. I introduced my fingers again for the same purpose as before, and found another child, which I delivered in the same manner as the other two.

The placenta was delivered in a short time with very little hemorrhage, and was the largest one that I have ever

seen. The three cords were attached to its center. We then gave her a hot antiseptic intrauterine douche and applied an antiseptic vulvar pad.

She received a slight perineal laceration, which was not detected at the time, as she was completely exhausted by the time she was cleaned and the bed changed. We stimulated her with strychnine, gr. 1-30 hypodermically, and aromatic spirit of ammonia. She rallied nicely and by night was feeling all right, and was the proudest mother I think I ever saw. The next morning I found her temperature 101° F., pulse 100. She said she had rested well during the night, but was not feeling well at that time.

By the third day she developed symptoms of puerperal infection. Dr. A. Huffaker, of Carson City, Nevada, was called in consultation and after a careful examination of the patient, agreed with my diagnosis. We formulated a plan of treatment and did everything in our power to save her but she kept sinking gradually but surely and died on the tenth day following confinement.

CASE II.—Mrs. C. B., French descent, strong and hearty, age 25 years, multipara. She was confined by a midwife—no antiseptics used. I was called to see her on the fourth day following confinement and found a well-developed case of puerperal infection. Dr. A. Huffaker of Carson City, Nevada, was called in consultation in this case. We agreed upon the diagnosis, also the plan of treatment. I remained by this woman's bedside for five days and nights, working with her almost constantly, as I had no trained nurse. At the end of that time she was practically out of danger,

Gennari says strychnine is not a heart stimulant, but is contraindicated in erethism and non-compensations.—*Rif. Med.*

Beriberi and sprue are alike due to oxalic acid generated by a fungus in the intestines, of a green color.—DeLoffre.

but complained of pain throughout her entire body for at least one month—finally regaining her usual health.

In regard to the first case, I wish to state that I was called to see her about one week before she was confined. I found her suffering from pruritis vulvæ. The itching was intense and was causing uterine contractions. I relieved the condition and the contractions ceased. I learned some time after her death that she had been suffering for several years with an abscess of the antrum of Highmore. She had been operated upon and up to the date of her death wore a silver tube which was inserted through the canine fossa.

If I was ever careful with a case of this kind in my life in regard to asepsis and antisepsis, I was with this one and yet she became infected and died.

While I do not wish to shirk any responsibility or avoid any blame that may be attached to my handling of the case, I mention these things as a probable cause of the infection that took place.

I am inclined to think that the lack of vitality had a great deal to do with the fatal termination of this case, as the abrasions in the vagina and the slight perineal laceration that she received made no attempt to heal—the tissues having a dead, festering appearance.

I noticed a marked difference between this case and one that I confined one week later. The child was born when I arrived and the patient had received a perineal laceration which I repaired. The wound healed nicely and the stitches were removed in one week. This woman was in a good, healthy condition which prevented the invasion of germs into her system. Some cases die in spite of all that we can do, while others

will get well with but very little treatment, and some will get well only after a long, hard-fought battle by the patient and physician.

I think it will be interesting, as well as instructive to review some of the principal predisposing causes of puerperal infection.

Textbooks state that during pregnancy the chemical composition of the blood undergoes a change. The total amount of blood circulating in the body is increased, but it is more watery than in the non-pregnant condition, due to a lessened amount of the principal constituents of the blood, except fibrin, which becomes greater in amount, and white blood corpuscles, which are increased in number. This condition causes a predisposition to inflammation—as tissue degeneration combined with pathological exudation, caused by some injurious agency, are the first steps in inflammation.

The heart, especially the left ventricle, becomes hypertrophic. The walls of the bloodvessels become thicker and their caliber larger especially those in the uterus and breasts. The lymphatics of the pelvis become so dilated that they look like veins. This dilatation of blood and lymph vessels predisposes to the formation of thrombi—which may not only constitute a fertile soil for the pathogenic microbes, but may also break down and be carried away by the circulation to remote parts that may become new centers of infection.

The nervous system is in a high state of irritation, and as every muscular contraction and all secretory functions are controlled by nervous action we can imagine that even the propagation of microbes—their distribution in the body



Wisconsin State Medical voted to admit members who still belong to sectarian local or state societies. Drop the term "irregular."

Oregon and Idaho medical societies admit reputable physicians even when belonging to so-called "irregular" sects.

and their expulsion from it—may be influenced by the condition of the nervus system.

At the end of labor the patient is exhausted by pain and loss of blood. The genital canal is full of tears and abrasions, which give the microbes free access to the tissues. Especially is this true if labor has been long and tedious and where operative measures have been used.

Defective muscular contractions, causing hemorrhage and eventually the formation of clots, prepares an excellent soil for microbes. Remnants of the secundines may be left behind due to imperfect separation of the decidua, which may undergo putrefaction and lead to serious consequences. Also, the lochial discharges may become a medium for the cultivation of all sorts of microbes—unless care is taken to prevent their decomposition.

Primiparas are more liable to become septic, due to the fact that labor is generally longer, the birth canal narrower, and the parts composing it softer, thereby causing more laceration and increasing the danger of infection. Lack of vitality undoubtedly renders the patient more susceptible to the disease. Venereal diseases, gonorrhea especially, are not uncommon sources of infection.

The exciting cause is the introduction of microbes into the body of the patient, generally into the genital tract, by the physician, nurse, or the patient herself. The infection may come from patients similarly affected, from suppurating or decaying tissue, from putrefying substances within or without the body. It may be carried by physicians and nurses from one patient to another on their hands, instruments or

clothing. Suppuration also on the person of physicians, nurses or patients, may cause infection. Performing autopsies and handling pus cases prior to the handling of obstetrical patients is exceedingly dangerous.

The symptoms vary according to the type with which we have to deal, but in most cases they are as follows: The patient gives a history of having had a chill on the third or fourth day following confinement; this is followed by high fever, severe headache, nausea and vomiting, intense thirst, anorexia and insomnia, and pain in the hypogastric region which later becomes general. Respiration is accelerated; pulse at first full and bounding, later rapid and weak. The temperature is high—may be 105° to 106° F. The patient's face has an anxious, pinched appearance at first; later the senses are dulled, and the countenance becomes listless. The tongue is coated with a brownish fur. The bowels are constipated at first, later become loose. The abdomen is bloated and tympanitic, urine concentrated and scanty. The uterus is large and tender, lochia scanty, grayish and (usually not always) offensive, or entirely suppressed. The secretion of milk does not begin, or if begun it ceases. The skin is hot and dry at first, later is bathed in perspiration, and finally becomes cold and clammy.

Lacerations, if present, show no tendency to heal. Prostration becomes extreme, and as the fatal end approaches the temperature ranges higher or may become subnormal, and the pulse rapid and weak. Delirium is followed by coma, and the patient passes away.

Puerperal infection being a bacterial disease, its treatment, preventive, as well



The *Medical Sentinel* for July is a finely-gotten-up and illustrated souvenir number, with interesting information.

Epilepsy: When disguised bromide is purchased from the advertiser its use is unrestricted and great harm is done.—N. E. M. J.

as curative, must chiefly be germicidal. Asepsis and antisepsis are the watch-words against it. Hygienic rules should be strictly observed and rigidly carried out. The surroundings of the patient should be kept clean and healthy. She should have plenty of good, pure air. The water she drinks and the food she takes should be pure and wholesome. She should change her clothing frequently and should bathe often enough to keep her skin in a healthy and clean condition. Her bowels should be kept open and her kidneys active. She should take light exercise every day and get plenty of sleep. If these simple rules are carried out, the patient should have very little trouble during or following confinement.

The antiseptic treatment consists in preparing the patient, physician and nurse, as you would for a major surgical operation. The methods in vogue are laid down in textbooks and should be familiar to every physician.

The constitutional treatment is, to a certain extent, symptomatic and should be antiseptic, eliminative and supportive in character. The symptoms that call for treatment are generally high fever, a full and bounding and later rapid and weak pulse, constipation or diarrhea, nausea and vomiting, tympany, severe pain and insomnia.

To reduce the elevated temperature, I use the dosimetric trinity and the defer- vescent compound. I have found these preparations perfectly reliable, safe and effective—if they are administered properly. I seldom use any other drugs to reduce elevated temperature from any cause, unless it is due to autointoxication—then I use the intestinal antiseptics, *i. e.*, the sulphocarbolates. I think it would

be a wise procedure to use them in every case of infection, to prevent the absorption of additional poison from the intestinal tract.

For the full and bounding pulse I use veratrine, one granule every fifteen to twenty minutes until the pulse is soft and compressible. Later, for the rapid and weak pulse, I use strychnine arsenate, gr. 1-30 every three hours, and digitalin as indicated. If more stimulation is desired—which is seldom—whisky is added until the desired effect is produced.

For constipation I use calomel, podophyllin and leptandrin, of each 1-6 grain every hour for six doses—followed by saline laxative, a teaspoonful in half a glass of water every hour until the bowels move freely.

For diarrhea I give zinc sulphocarbolate, gr. 5 every two hours until bowels are checked, this after a thorough evacuation by enemas and the saline.

Nausea and vomiting generally cease after the bowels have been thoroughly evacuated. If not I find caroid, manganese comp., and anti-nausea granules, and cracked ice held in the mouth, very effective.

For tympany I find nothing so effective as the intestinal antiseptics, given to effect.

For severe pain morphine may be given hypodermically as indicated, but it has a tendency to check the secretions which is not desirable in these cases. The coal-tar preparations may be used, but they have a tendency to depress the heart and their effects should be closely watched.

Insomnia is generally due to high fever, pain and anxiety. After the temperature has been reduced, and pain re-

The cause of the evil lies in the deficient teaching of pharmacology and therapeutics in the medical colleges.—Frank Billings.

Skepticism in therapeutics is undoubtedly responsible for much of the evil. A return to old-fashioned remedies advised.—Musser.

lieved, a few doses of the triple bromides will prove effective in controlling this condition.

Systemic medication consists of calcium sulphide given to saturation and nuclein, 10 drops on the tongue morning and night. Antistreptococcic serum, I have used only once. The only benefit that I derived from its use was a slight reduction in temperature. The patient died, so that I can neither recommend nor condemn it.

For support, I use strychnine arsenate, gr. 1-30 every two to four hours. Whisky should be given as often and in as large doses as are indicated. Hot normal salt solution, subcutaneously, is of decided value as it dilutes the poison, lessens the toxemia and stimulates the kidneys to free action.

The local treatment consists of emptying the uterus, if necessary with a curette. Antiseptic intrauterine irrigation every four to twelve hours should be given and an iodoform gauze drain inserted up to the fundus of the uterus, which should be removed before and replaced after each irrigation.

If lacerations are present and stitches have been taken they should be removed, and the parts thoroughly disinfected, and some antiseptic powder applied. The vulva should be washed with an antiseptic solution every time the urine and feces are passed, and an antiseptic vulvar pad applied. Vaginal douches should be given several times daily when intrauterine irrigations are not indicated. Tepid sponge baths and cold packs to the abdomen are very effective in reducing temperature and have a tonic effect that is very beneficial to the patient. The ice-bag may be used, but is rather severe and I prefer the cold packs.

Carbolized epsom baths, hot or cold, given every two hours, if indicated, are very effective in reducing elevated temperature and relieving pain. They tone up the dermal glands and very materially assist in eliminating the poison from the system. Enemas of salt solution or soap-suds containing turpentine may be used to keep the bowels open and help control tympany. Hot turpentine stupes applied to the abdomen will also control tympany and ease pain.

Unguentum Credé has been highly extolled as a local application in this disease. I have used it only once, and noticed a slight reduction in temperature while using it, but I was using other things at the same time. The patient recovered, so that it may have done some good.

Large Spanish fly blisters applied to the abdomen over the uterus have been highly recommended. I have never used them, but the treatment, while severe, sounds plausible. Antiphlogistine may be applied to the abdomen but it is cumbersome and slow in action. I prefer hot or cold applications, as they can be applied and removed more easily and their effects are quicker.

I have endeavored to give my own experience in this paper, as far as I could, in regard to what I have *seen* and *done* in these cases. But it has not been satisfactory, and has not proved successful in every case, as the first case I have reported will show.

The two cases reported were treated along this line—one died—the other recovered. So if the editors of the CLINIC or any of the CLINIC family can enlighten us upon the treatment of this disease, I shall appreciate it very much.

Gardnerville, Nevada.



Medical students are not taught properly to prescribe, and laxity in taking up ready-made prescriptions ensues.—Priestly.

The blame must not be laid on the schools, but on the men. The true physician is a student all his life.—Witherspoon.



# Editorial Chat

## IS THERE A RATIONAL BASIS FOR A SCIENTIFIC THERAPY?

**T**HAT galenical therapeutics is satisfactory no one would for a moment contend. The practice is unsettled, the theory nebulous. The most emphatic condemnation of the one, and the most caustic criticism of the other, pass unanswered—because unanswerable—and the higher the attainments, the more illustrious the character of the critic, the more pronounced is his disparagement of the drug therapy of the present day. It is unnecessary to adduce examples of these statements; they will recur to the recollection of every physician versed in the literature of his profession.

Every work on therapeutics bewails the lamentable fact that the basis of the art is almost exclusively empiric. What does the word mean, exactly? The Standard Dictionary tells us that empiric "is relating to or based on experience or observation;" and secondly, "relying on or guided by experience or observation rather than scientific knowledge; generalizing from limited facts; hence, charlatan." The prevalent opinion as to the readers of certain quasi-medical journals is contemptuously expressed by saying that they are men who ask solely for "something good for mumps!"

Evidently, in view of the acknowledged unreliability of strictly personal observations in the sick-room, when there is no foundation of pathological knowledge on the part of the observer,

no perception of the influence of suggestion or appreciation of the natural course of disease and its tendencies, there must be a better basis for our practice if it is ever to rank as a science.

Hitherto the criticism has been almost entirely destructive. Headland, in his "Action of Medicines" showed the fallacies of the commonly admitted theories, but his attempts at reconstruction were unsatisfactory, and in fact difficult of comprehension, because his ideas were not clearly developed in his own mind. Anstie, in his fine work on "Stimulants and Narcotics," showed that he clearly apprehended the crudeness of the old system. He stripped off the verbiage and showed that there had been simply a change in the words designating the ideas, but that each generation had clung to the thought expressed by the phrase—"bleed down to the brandy point and then brandy up to the bleeding point." Stimulation and sedation—the profession stopped with the comprehension of this elementary principle—and each new generation renamed it but clung to the idea.

Nevertheless, Anstie also failed to materially mend matters. Both the authors quoted were hampered by the imperfections of their physiologic and pathologic knowledge, and by the absence of a line of definite, uniformly-acting remedial agents. No certainties can possibly be founded upon uncertainties. Anstie studied neuralgias all

his life, and enlarged our knowledge by his observations and acute reasoning, but he never appreciated the existence of that master key—autotoxemia.

Since his time an enormous quantity of work has been done in the line of experimental therapeutics. Driven of necessity to the alkaloids and other active principles to find uniformly acting agents from which to obtain uniform results, the workers in this department have supplied us with a wealth of data concerning these remedies, which for scientific precision can not be equaled by anything published upon the galenics. We *know* what atropine can do; we guess what belladonna will probably, hyoscyamus may, possibly, accomplish. But as yet these researches have not been utilized; they have made but little impression upon the practice of the masses of the profession. Why is this?

We are met by the difficulty that these researches and the ordinary practice of the profession do not meet. Like two tunnels run under a mountain from opposite sides, badly designed, they fail to meet at the appointed place for junction. It is a case of bad surveying—and the fault lies with the clinical end of the line.

We have been taught to attack a disease through its name. Certain groups of phenomena have been associated under certain designations, and are known to us as cancer, pleurisy, Bright's disease, phthisis, etc. Few of the affections thus named are true pathologic entities, and their titles are only employed by the more learned as conveniences. But to the rank and file they are distinct species, and their efforts at treatment are mainly directed toward finding specifics which may be applied to each of these diseases:



Medical education must be improved from its practical side. Diagnosis, pathology, bacteriology; treatment hardly mentioned.—King.

names. And yet nothing is more certain than that comparatively few maladies admit of any specific treatment, while many of them require at times remedies whose action is exactly the opposite of that of remedies required at other times—and this often occurs in the same case. Despite this universally admitted fact, the books of prescriptions contain hundreds of formulas directed against diseases by their names. This lamentable mistake has sidetracked therapeutics and prevented the utilization of the priceless researches of the experimenters.

The remedial agents that have been scientifically studied, and whose powers have been most strictly defined are not specific remedies for diseases but for conditions. We have agents that exalt and others that depress certain functions—it is up to the physician to ascertain in each case what functions of his patient's body need stimulation or depression, and to apply the proper remedies. The more complete his knowledge of the physiologic workings of the human body, of the alterations caused by disease, and the more precise his adaptation of therapeutic measures to the desired ends, the more nearly he approximates the ideal of scientific medicine. These propositions are axiomatic—there can be no discussion of them. The main point lies in this query: Have we such a wealth of remedial agents that can be applied with a scientific precision that will enable us to base upon it a system of practice that embraces the whole wide field with all its multifarious conditions and needs? To this we answer, no—not at present. This work is far from being completed; but it has progressed sufficiently to give us a firm foundation on which to build.

Typhoid: The usual parallelism between pulse and temperature is not present in very young children.—W. J. Butler.

The writers of this paper have spent a number of years and thousands of dollars in collecting from all sources, books, monographs, pamphlets and journals, etc., in all the languages of the civilized world, the data available for this work. The results are published in a book of over 400 pages, entitled "Alkaloidal Therapeutics." In this work 155 remedies are considered, alkaloids, glucosides and chemical substances, being all of which sufficient information could be gathered to entitle them to consideration. Of some of these there is a measurably complete account given, from which the reader can obtain copious information as to the effects of the remedy in health and in disease; while of others the material is scanty and obscure, and these are included because what little is known seems to indicate the probable value of the drug and the wisdom of giving it further attention.

Add to these the sera and the really valuable synthetics that have received corresponding study, and we have a great number of remedies whose powers are known to us as far as the knowledge of human physiology permits. To this extent, there is, therefore, at last a scientific basis for therapeutics, in that we may reason from a tolerably exact knowledge of what powers our remedies possess, and apply them to the pathologic conditions in which such powers are curative. We can affirm positively that the wealth of this material is sufficient to warrant the physician in shifting his ground from the old empiric list to these, and employing them as the rule, simply using the older remedies and methods in the exceptional instances where the ap-

plications of the exact agents have not been ascertained. The more generally this change shall be made, the more rapidly will these gaps be filled in.

To those who have given little attention to this matter the change may seem a small one—simply the substitution of a somewhat better line of preparations for those hitherto in vogue. Make no mistake—it is a revolution, a renaissance in therapeutics. The use of therapeutic certainties, accurately adapted to accurately appreciated needs, marks the appearance of a new era, the development of a new species of physician.

The man who uses such highly specialized remedies must needs specialize equally his appreciation of the pathologic conditions presenting in each case; and that means a more careful investigation and closer watchfulness of his patient. Certainly this is not a matter for regret! Moreover, the physician will surely form the habit of early and vigorous intervention in acute maladies, since he will recognize the circulatory disturbance ushering in these attacks, and he knows the remedies that will restore normal circulatory equilibrium—and he will become an advocate of such early and decisive intervention. There will be acquired with the habit of accurate and decisive meditation, that of accurate and decisive thinking—and again we say this is not a matter to be regretted!

There is already manifest a vitality and vigor in that section of the adopted scientific therapy, that may convey a lesson. Therapeutic nihilism is unknown here; expectancy and pessimism have been ejected, and a vigorous, active optimism replaces them. There is a certain



Haig's diet, hygiene and therapy, are usually useful though his theories have been discarded by modern pathologists.

By using pure creolin internally, Hubert reduced the mortality in cholera from 60 to 6 per cent. Dose grt. daily.—Vratch.

consciousness of power under that alert face, which inspires confidence unwittingly to the doctor himself. It's a renaissance—a re-birth—sure enough.



#### THE LINES ARE DOWN.

Our campaign for the establishment of active-principle therapeutics has at least succeeded in defining the opposition, so that we "know where we are at." There are two great forces that dispute the progress of this reform, to which all opposition may be assigned.

First, the force of inertia in the medical profession. We don't want to be reformed; we hesitate about embarking on unknown seas; we have painfully mastered the old system and do not feel like quitting it for a new one that looks difficult. This will constitute our greatest obstacle until men realize how much easier it is to practise by the natural method, observing clinical conditions and fitting the treatment to these, instead of endeavoring to recollect what our textbooks and our teachers said about things.

The orthodox prescription must go. The man who teaches prescription writing—or rather copying—must repent. The calculation of chances and weighing of possibilities must give place to the swift and sure application of certainties. The only method in existence that allows the beginner to utilize what he knows, be it only the rate and tension of the pulse, and to go to work with what mental capital he possesses, be it little or much, is that which is founded upon the active principle in therapeutics.

Second, the force wielded by Invested Capital, capital that is earning usury? and does not want to be disturbed. "The

uncertainty of the galenicals is the life of the pharmaceutical trade," was a prominent manufacturing chemist's reason for refusing to aid the dosimetric movement. All the same, this very uncertainty is the death of scientific medicine.

If his assertion be true, and perhaps it is, the old-time pharmaceutic trade had better die at once, for it bars the way to progress in the art of medicine—the art of saving lives and relieving suffering. In truth, it bars the way to a better and wider pharmacy, one that limits itself to its true function, the supply of dependable weapons for the physician's wielding, a pharmacy in which the rifle is never substituted with the blunderbuss. It is only the sort of pharmacy that presumes to direct the physician's choice of means and methods that will die, as it surely should, and in dying will give place to a better.

No secret remedies. No monopolies. No dictation or instruction of the physician by the pharmacist; no substitution, no counter-prescribing, but true pharmacy, the simple presentation of right remedies for the physician's use. That's all!



#### THE PORTLAND MEETING.

The meeting of the A. M. A. at Portland will rank as one of the most successful in the history of the Association. The Lewis and Clark Exposition, the professional attractions and the glorious climate of the Northwest, combined inducements the doctor could not resist; and long before the meeting closed the registration had climbed up over 1,600—and the doctor brought his wife along



At Baku chlorine water proved effective in treating cholera; also as an antidote in poisoning from bitter almonds.—Vratch.

With the tropics we have annexed uncinariasis, dysentery, yellow fever, filariasis, Malta fever, trypanosomiasis, etc.—Blumer.

too. For the delightful excursion up the river more than 3,000 guests turned up. The entertainments were lavish and unique beyond anything in the history of the Association. Never has the A. M. A. been so entertained; never has a local profession done anything which can be compared with that which was accomplished by the doctors of Portland.

We left Chicago on a "special" Association train on the C., M. & St. P., and Northern Pacific. The stress on the rolling stock was manifest in the ancient and dilapidated car, probably reclaimed from the boneyard as out of date and worn out. We had the stateroom but of its three berths but one could be utilized on account of the general decrepitude, and one of us had to occupy a berth in the body of the car. But this was made up for by the excellence of the roadbed which prevented even a sign of carsickness, the excellence of the dining-car service and the unequalled courtesy of the attendants—"the best porters and waiters we ever traveled with," said several of the party. The weather was fine too, and only one day hot enough to require specially thin garments. A number of ladies were on the car, who greatly enlivened the journey. Our train was twelve hours late, missing the meeting of the medical editors, but we landed at the banquet, which was fine. A prominent feature on the menu was "Mt. Tabor owls"—which remarkably resembled New York quail or Chicago incubator chickens. The speeches were great, even in the absence of Moyer, Wile and Lanphear.

The climate of Portland must be near perfection, if not specially arranged for our visit. Even in July a light overcoat

was agreeable in the evenings, while it is said that frosts are rare in winter and an inch of snow is the limit. Flowers bloom outside, the year round, in this "Rose City," the roses being gorgeous during our visit though said to be at their best a month earlier. But the hydrangeas, honeysuckles, sweet peas, and many other beauties made every home enticing. We luxuriated in enormous cherries, and in "cracked crabs," of which one made a full meal—delicious, as was the Royal Chinook salmon. The oysters were fine also, despite the month being without an "R."

Our party had engaged rooms at the Portland a full month in advance, and on application were referred to a private house a mile away—but the proprietor disclaimed any knowledge of an arrangement with the hotel! Here was trouble; from which we were rescued by a certain device worn by one of our party and similar to one worn by a Portland gentleman—on the strength of which we were taken in and most hospitably cared for. The difficulty was reported at the hotel—and met with the sublimest indifference. Evidently these Westerners are accustomed to look out for themselves, and the solicitous attention for guests manifested by eastern hotel men is unknown here. The mail was a day late in being sorted at this same Portland hotel, and it did not seem to occur to the manager that men hungry for mail might be gratified by the engagement of one extra helper to attend to the matter—the same careless indifference was manifested. At the table it was with difficulty we secured meals after hours' waiting; until we discovered



Peary announced a vacancy in his ship for a surgeon and in 24 hours 300 applications came in. L. J. Wolf of Oregon got the job.

Animals are immunized against fatigue by feeding them fatigue antitoxins and injecting fatigue toxins. Try it on office boy.



"The Tavern" and steered our party there, when all such trouble ceased.

But from the accounts given by our friends this difficulty was confined to the Portland, and at the other hotels accommodations were plentiful, excellent, and the service satisfactory. The Portland being the "headquarters" everyone went there, and the capacity of house and management was overwhelmed.

The Exposition was not extensive as compared with those of Chicago and St. Louis, but good, and especially attractive as to the displays made by Oregon, Washington, California, Montana, Idaho and Utah in the mining, agriculture and educational matters. Space forbids further mention.

For us the interest centered in the Section of Pharmacology. The title has been changed by the addition of Therapeutics, as many supposed that everything except drug therapy was excluded heretofore. This probably explained the paucity of papers presented this year—and the rigidly exclusive policy adopted by the officers of the Section, toward everything that savored of proprietary medicine. The officers seem to have been almost morbidly sensitive over the possibility that the Section might be "worked" in some commercial interest—and in this they had the sympathy of the members who value the Section too highly to permit such a degradation.

An interesting series of reports on the Pharmacopeia brought up the burning question as to the Council of Pharmacy and Chemistry, and the relations of the A. M. A. *Journal* to the advertising interests. There was evident among the exhibitors much irritation on this topic, and a disposition to oppose the movement vigorously. But several great

houses announced that they would meet any ethical standard set by the Association, and regulate their advertisements, and possibly their lists, in harmony therewith. This will establish a distinction between firms that adopt this standard and those that do not, to the disadvantage of the latter, and it remains to be seen whether the latter can withstand the pressure of competitors, who advertise their goods as "fully meeting the ethical standard set by the A. M. A."

Among the medical journalists there was a good deal of talk as to the position of the *Journal of the Association* as a rival of the independent journals. Medical journalism is neither a disreputable nor an unnecessary business. On the contrary it is absolutely essential that the profession should enjoy the freest facilities for the expression of opinion. Official publications like the Association journal and the state society magazines should have the counterpoise of independent periodicals, or we degenerate into officialdom. Why then should we as a body compete with ourselves as individuals? The Association journal reports an income from advertising last year of over \$90,000, which really represents that much taken from the independent journals. It is urged by the latter that the Association journal should cease to publish advertising of any sort. But the surplus of the Association is less than \$50,000, and although the expense of getting out the journal without advertisements would be less, there would not be a saving of \$1,000 an issue. It does not seem financially feasible, therefore, though there is much to be said in favor of the proposition.



Treating summer complaint resolves itself into maintaining the general resistance and neutralizing specific intoxication.—J. C. Cook.

Gasparini says that copious applications of dried powdered alum will cure any case of ingrowing toe-nail within five days.

Around the section rooms were distributed copies of a journal known as the *American Medical Journalist*. It virulently, but with some ability, assailed the Association, and especially Robinson of the *Critic & Guide*; and also virulently, but with no ability, took a smash at THE ALKALOIDAL CLINIC. Not that we have done anything directly antagonistic to the clique it represents, but we teach scientific medicine, and that they evidently find is cutting into their profits. There is nothing in the attack deserving mention, excepting possibly the attempt at deception made by so mixing quotations from the CLINIC with sentiments gratuitously attributed to it, as to leave the impression with readers that all they print is quoted from our pages, without actually saying so. This despicable trick stamps its character on the publication that is guilty of it. We are heart and soul in the fight for the doctor, and for a clean, pure, non-secret, non-monopolistic therapeutics, and ready to use the resources of THE ALKALOIDAL CLINIC to the limit, in the support of any such movement; but let the effort be swerved aside to serve the selfish ends of a clique of big schools, or a greedy drug monopoly, or to oppress any section of the profession, and we are in opposition instantaneously. And that's enough as to ourselves; we have more important subjects for consideration.

One of the best papers read at the Section was by Dr. Brower, who predicted the revival of Therapeutics in the near future. He is one of the few who have never lost faith in medicine or bowed the knee to the golden calf of commercialism. Many of the Section would have been pleased to see Dr.

Brower elected chairman for the coming year, but as the secretary was from Chicago, it was deemed wiser to take the chairman from the East, and a worthy man, active in the Section for years, was found in Dr. Reilly of New York. Dr. Heinrich Stern made an acceptable chairman and was elected delegate unanimously. His researches upon the therapeutics of formic acid proved exceedingly interesting. This agent resembles cantharidin, and is useful in atonic states of the urinary tract; in gouty affections, and even in cancer it has given evidences of a possible value in retarding or retrogressing the growth. It is also diuretic and diaphoretic. The evidence presented makes it advisable to test this remedy further, especially in such affections as carcinoma, in which there is nothing to lose and all to gain. In tuberculosis Stern reports the best results from formic acid of all drugs yet tested.

The next meeting is to be at Boston, where we hope to see as large a number of our friends as possible. If the plans now being formed materialize there will be unusual attractions at that meeting in a scientific sense.

Coming home, we did better—only eight hours behind time—the same obsolete equipment. But coming and going, give me for company a few doctors who have actually succeeded in getting away! Finest of traveling companions in the world; and we shall not soon forget those we met on this trip. The scenery was delightful and varied; horseshoe curves finer than that on the Pennsylvania, two-mile tunnels unlighted but girless, snowy peaks, encircling mountains with fertile, highly cul-



Intestinal antiseptics with calomel has no effect on nitrogen excretion, but stops hippuric acid excretion completely.—Prager.

D. D. Stewart said aconite was preferable to glonoin for a remedy for conditions of persistent high tension.—J. A. M. A.

tivated levels, cattle grazing on a thousand hills, irrigation works, and on the Pacific slope, trees whose altitude as ratioed to girth astonished the easterners; and many other marvels.



#### DISPENSING: HOW AND HOW NOT TO DO IT.

A valued friend, who knows what's what, writes us as follows:

I do nearly all my own dispensing; have done it for thirty-two years—believe in it. I cannot understand why all physicians don't do it—unless they think they are "standing in with the druggist." They are being swallowed by the druggists and manufacturers.

A. L. MAHAFFEY.

Albuquerque, N. M.

Another friend, who is a shade antique in his methods, but does his own dispensing because there is no pharmacy within reach, writes us that his drug bills amount to nearly \$100 a month, and keep him poor.

The bulk of the former's work is done with the alkaloids, as may be expected. The latter practises almost exclusively with the ready-made proprietary formulas prepared by the manufacturing chemists. On his shelves may be found every compound advertised in the medical journals. The manufacturing druggist does his prescribing for him. If one vaunted compound fails to benefit his patient, he turns to the advertising pages of his journals and selects another. He has several tonic mixtures, each containing all the tonics known to medical science, and he gives whichever of these his patient likes best. He has some tablets for headache, some others for fever, two compound cathartics, and a miscellaneous lot of other things for which he pays

huge prices. He is often at a loss which to select, as his textbooks on *materia medica* and therapeutics—sent out by the manufacturers—tell him each of their combinations cures everything in sight—and a lot more.

Does he know why he gives each ingredient of the mess? Certainly—because the maker told him to do so!

Does he know what each ingredient will do, and what to look for as its action, when to stop it, when to change it? Not in the least; he dispenses what someone tells him is good for typhoid fever, or pneumonia, or weakness, and he has not the slightest notion of the action of each ingredient nor does he know whether they are really present—in fact, he uses each mixture as a single remedy, and judges solely by the patient's recovery or death as to effect. Drug action is an unsuspected science to him. It has never penetrated to his consciousness that there is such a thing.

Nothing pleases us more than the knowledge that sometimes we have produced such men so hard that they have been aroused and made to go to work and study. Makes 'em mad at us often! We like that. Compels them to spend so much time at the patient's bedside that they haven't time to consult their books. Ye gods! If we could only get a law passed compelling every doctor to burn his textbooks the moment he received his diploma, and making him write a set for himself, out of his own clinical experiences! What a lot of unused brain cells would be set humming!

By all means, dispense your medicines—and administer them—and stay by your patient till you have seen the drug-action you want, just enough of it, and after you have done this a few times you



Dickey advises morphine, gr. 1-4 and atropine, 1-50 for severe hemorrhage. The atropine here overcomes the morphine.

The *N. A. Jour. Hom.* calls attention to the similarity between formic acid and Apis Mel. as applied therapeutically.

can safely give directions to the attendants and go to bed. If you need anything from the drug store, get it; if you want to prescribe, prescribe; specify what you want and see that you get it. Be independent! Know your own business and do it in your own way, brooking hindrance and espionage from no man. Be *it!* and let people know it. "Good morning, king."



### QUARRELS.

A home missionary in the South tells a touching little story of a young couple who had quarreled over the name of their firstborn. One wanted it named Mary Jane, the other wished Sarah Jane. They compromised at last on just Jane.

How many of our quarrels have any more substantial foundation? How many times we would lop off nine-tenths of the blame we attribute to our friend and enemy, were we to honestly think of what we would ourselves have done had we been in his place, exposed to his temptations, subject to his difficulties. Did you never do a real mean thing toward some other doctor? Not once? Then don't talk—whether you did or did not, the result is the same—you were not exposed to his trials or else you yielded to them.

Next to the appreciation of the other man's difficulties comes that of his rights. As he sees them. As you would see them were you he.

These considerations lead to that necessary process, the accurate definition of the position of each party to the controversy. It is remarkable how little there is left to quarrel about when these preliminaries have been attended to—the



Briggs removed from a man's rectum a chicken's sternum, which the patient could not account for.—*Nashville Jour. M. & S.*

difficulty is that they are not attended to as preliminaries but usually left for the final settlement when temper and other things have been wasted and bad blood engendered. Why not begin with them?

After all, the other fellow is human; he isn't such a bad man in the eyes of his friends; he is striving for the same ends you pursue—and what is his enmity likely to benefit you? Treat him well; be even generous to him; speak of him in such a manner that for shame's sake he can not malign you; and make him feel that you have met him a little more than half way. His subsequent hostility to you will have lost its snap. Sum it up thus: Think kindly, act kindly, speak kindly, of everyone, and be sure your enemy will not change and the irregular rascal will not reform before you cut him out.



### LIFE—LONG LIFE: WHY WE WANT TO LIVE.

"The Pittsburg cemeteries are full of multimillionaires who died at or before the age of 45 years."

What is Wealth without Life?

What is Life without Health?

What is Health without Joy?

Life, health and happiness, then, are the three rational objects of man's existence, and beyond these all else are simply accessories. But of these, the fundamental one, that on which all the others are based, is the last and least to be considered. The only reward held out to the doer of good, in the Decalogue, is long life in this world, which did not in the older time seem to be considered specially a vale of tears, but as something to be clung to with might and

How would you like your patients to recommend you by saying: "I have sometimes thought he might be doing me some good?"

main. "That thy days may be long in the land which the Lord thy God hath given thee," reads the Holy Writ, and not an intimation is given of any postponement of the blessings to a postmortem date.

Far be it from us to question or even discuss the belief in a future life, but we simply call attention to the sterling common sense of this admonition, that reaches the comprehension of everyone, whatever may be the shade of their religious beliefs. For though there be many a good man and more good women, holding collectively a myriad of faiths, we are not able to detect in any of them much anxiety to realize upon their expectations beyond the grave. Even the Pope—and whatever our own views as to his office, we all agree upon the personally blameless and Christian character of the recent occupants of the chair of Peter—the Pope himself shows a disposition to hold on to his present home terrestrial.

There is a tradition that if a Pope, on taking his seat, neglects to change his name, he will die before the end of the first year of his pontificate—and in fact the last four Popes who did not make this change actually did die within the year. And it has been more than four centuries since anyone braved the peril by retaining his former name. We, mere mortals, high privates in the ranks of the savable, may be excused for clinging to this life, with such illustrious examples before us.

We don't want to die. Die? With the Jap-Russ war going on? The new epoch in the world's history ushered in by the guns of Togo and Oyama just opening? The great Anglo-Saxon rap-

prochement bringing within the influence of attraction those two huge human globules; the electric age supplanting the age of steam? The desiccation of dogma and the growth of confidence in reason, as superstition is replaced by knowledge? The final conquest of Africa after resisting civilization for twice ten thousand years? The stir of approaching awaking in the Mongol? Surely if even a man wanted to die it could not be at such an eventful period in the world's history!

Then there are some personal reasons for one's desiring to remain here a little longer—yes, a good deal longer. Children not all educated yet, or not launched properly: and those who are out show a lamentable disposition to look with their own milky eyes and not yours, to insanely kick that same old hat, though you assure them you stubbed your toes on the brick under it: the roof needs painting—and the garden is coming along so nice! No explanation is needed; we hear the *Amens* quite plainly.

For ourselves we say frankly, that the main object of our life is not to get rich, or powerful, but to prolong our life to the last possibility our vitality will permit, that we may do the greatest possible good, to our fellows; and to keep health so as to extract from life as much enjoyment as we possibly can. We count any day as lost into which we do not crowd as much of helpfulness and pleasure as it will contain. We lose no opportunity to try new delights. In the restaurant we scan the menu for any dish we never tasted—sometimes we hit upon kladderadatch or *fonghi al 'olio*, but then again we found broiled live



Antiseptics do shorten the duration of typhoid fever to 1-2 or 1-4 the usual time. It is almost criminal to omit them.—Ammon.

Cupric arsenite is an antiseptic of great value in the choleraic diseases of children and adults.—Ammon, *Med. Era*.



lobster that way. And crawfish bisquel! And when we have a chance we will try Juan Valera's meat pies, stuffed with anchovies, sardines, tomatoes and onions, and find why he says they are so good! And all the time we will so shape our course as to make life's product helpful to our limit in the great propaganda to which we are committed.

We are not going to inflict upon our readers a moral disquisition as to what constitutes happiness, and whether any but the altruist can be really happy. Of course there can be little pleasure in seeing any but bright, happy, hopeful faces about one; and the consciousness of doing good is calculated to swell the heart and the head of any man. We have seen the face of a grossly-sensual woman transfigured into something angelic as she snatched the cloak from her little daughter's back and gave it to a little poor, shivering street waif. But—now own up—honest—cross your heart—wasn't there a sudden upspringing of appreciation when Mark Twain told of his relief when he had slaughtered conscience and started in to rid himself of objectionable neighbors and things?

Every man is a law unto himself as to what constitutes happiness to him; and no one may establish his own law as obligatory to his neighbors. We may prefer Wagner, but another has his rights and may equally delight in ragtime. The race has been fed on moral platitudes to repletion, and like the little kindergarten boys sometimes finds relief in wickedness to restore the equilibrium. You know the story: The boys had been good to the limit of boy endurance and laid their heads together to determine the worst word they knew; then they simulta-

neously startled the teacher by yelling, "bedbug!"

One friend tells us it is wrong to shoot wild ducks! Maybe that is the reason we return from a day in the marshes with the feeling that every particle of meanness has been eradicated from our being. Wicked to take the life of a fish? Now after landing that big muskellunge we don't have to do any more sinning for a year—except the bragging. Sneak off to the baseball some afternoon when we should be at work—isn't the fun mainly in peering about to see if anyone who knows you is there to witness your dereliction? Isn't the sense of rascality exhilarating?

Let us drop the whole moral aspect of the question by quoting approvingly Herbert Spencer's dictum that every human being's first duty is to himself; and this selfishness based on an enlightened mind and a sympathetic heart should constitute the foundation of each person's philosophy. The use each makes of his life is another story; we will consider merely the means of prolonging life, in health.

Is not the whole art of medicine devoted to this end? Indirectly; the doctor is called to restore health and avert death when threatened by the assaults of disease. Our study is how to avoid disease, to so manage our stock of vital force as to make it last as long as possible; and especially to inquire if it be possible by any means to increase that stock. In individual cases we seek to recognize the causes that may be at work tending to early extinction of life, and the best means of obviating them. This is the part of the medical adviser; here we can treat only of these sources of degen-



The mightiest weapon we have is copper sulphate; gr. j in 3 1-2 gallons water will destroy typhoid germs in a few hours.—Bailey.

Dysentery: Quiet for the intestinal tract, and antiseptics given with care, is the best course to pursue.—Buck, *Med. Era*.

eration in a general way; leaving the application to each individual of what pertains specifically to him.



#### NOT SO BAD EITHER.

We quote the following from Dr. Robinson's *Critic and Guide*:

As is well known, practically all physicians in Germany specify on their signs the specialty they practice. Everywhere you see the big, ugly metal-enameled signs with Dr. So and So, specialist in genito-urinary and skin diseases, specialist in nervous diseases, specialist in stomach and bowel troubles, etc., etc. This does not refer to quack advertising physicians, but to physicians of the highest standing, *privat docenten*, professors, etc. When I told some of those gentlemen, that such a sign would in our country be considered unethical, that it would, in all probability, prevent the physician employing such a sign from becoming a member of a medical society, they were extremely incredulous. And when I convinced them that it was a fact, that I was not "guying" them, their astonishment was beyond description. "*Das ist ja der reinste Unsinn*," and then they proceeded to prove to me not only the usefulness but the necessity of such a specification to both physician and patient. It saves the patient the trouble of ringing the bells of physicians who refuse to attend to him, because it is not in their line, it saves the doctor trouble and annoyance. "Just imagine the father of a croupy child ringing wildly the bell of an ophthalmologist, then of a genito-urinary surgeon, then of a psychiatrist. In the meantime the child dies." There is, I confess, a good deal of force in this argument. Another gentleman, whose name is known from one end of the world to another, said, that that was simply "ethics gone crazy." It must be added that here in Germany medicine is more specialized than it is with us, and in the large cities there are

fewer general practitioners than is the case with us. Therefore specification of specialty is perhaps more necessary than with us. But altogether many parts of our written and unwritten code of ethics, followed scrupulously by the better part of our profession, have no existence here. But more of this next time.

At first sight this view of the matter seems a long way from right, but when one comes to look at it in a straightforward way and thinks it over seriously,—why not? Any privilege may be abused; you wouldn't stop drinking water because some one gulped it down so fast and in such quantities as to give him the colic. Don't assume that the CLINIC approves of this but just go to thinking. Meanwhile don't fail to let the people know that you are alive, that you know how to do things, and when the chance presents itself *do* something and get your price!



#### ALLIES AGAIN.

Not the least of the benefits likely to accrue from the work of the Council of Pharmacy and Chemistry is the closer union of the physician with his old ally the pharmacist. One of the sorest points with the former has been the sale and too often the pushing of patent nostrums by the drugman, to the grievous injury of the doctor.

But the gentry who deal in these articles have not proved faithful to the man who has made their fortunes—the retail pharmacist. Their course has been to get a footing through him, get their goods before the public, and then turn them loose through the department stores. There is no special use in having a druggist to dispense a nostrum when



Gastrointestinal Ills: Thoroughly cleanse the tract, then use astringents; my preference being for zinc sulphocarbolate.—Turner.

Summer Complaint: The chief element in the prognosis is the physician's belief in intestinal antiseptics.—Rice, *Med. Era*.

any three-dollar-a-week sales person can do it as easily. Even with those who really try to keep in with the druggist and refuse their goods to the department stores, the profit is trifling. Sell a bottle for a dollar and clear twelve cents on it, out of which must come the store expenses, interest on investment, risks of having dead stock on hand, and the other little drawbacks which the druggist does not need to have recalled to his mind. But from a prescription costing a dollar the druggist gets a reasonable profit over and above these expenses; in fact, he gets the profit the nostrum man gets otherwise.

There are no two men on earth who should be firmer allies than the doctor and the druggist. Every legitimate interest each has is shared by the other; every man and interest that antagonizes the one, equally antagonizes the other.

Let us come together, and see if we can not find means to restore the old union, of interests and of sentiment. We are each better off with the other, and if we both feel this, there is no real obstacle to union.



#### CLOSE TO THE REAL THING.

The fact that most of the disorders which afflict humanity are due to deranged conditions of the digestive, assimilative or eliminative functions (more particularly to decreased intestinal activity) is being generally recognized. Even text-book writers are beginning to talk about "autotoxemia" and "intestinal antisepsis," while contributors to the medical press who frankly state their acceptance of the alkaloidal theories of the CLINIC are numerous.



Summer Complaint: I am opposed to opiates in any form given to any of these patients.

—J. P. Rice, *Medical Era*.

Dr. Hydrick, of Coleman, Ark., describes in the *Medical Era*, for May, "A Puzzling Case," which he was inclined to consider "the result of an overloaded stomach and a foul condition of the bowel, with absorption of poisons from retained fecal matter." As a result the man received prompt and thorough cleaning out and cleaning up, and promptly got well; and while it remains a question whether the illness which caused the doctor to be called was due to the above causes, or to nervous and physical overstrain, incurred some days prior, it is certain that the steps taken enabled the system to benefit more fully by the other remedial measures employed; and this they always will.

In this case glonoin, strychnine, atropine and morphine were used as needed; and, from the dosage given and the method of administration as described, it is quite evident that Dr. Hydrick has absorbed the dosimetric doctrines of the CLINIC, even if he is not distinctly and pronouncedly an alkalometrist, and one of "the family," as we believe he is.

The only criticism we have to make of his masterly handling of a most decidedly puzzling case is, that he should have used divided doses of calomel, in place of ipecac, gr. 4, resin podophyllin, gr. 1, pulv. capsicum, gr. 1; divided into four capsules—one every four hours. If he had given calomel, gr. 1-6, podophyllin, gr. 1-6, emetine, gr. 1-67, capsicum, gr. 1-134, every thirty minutes for six doses, followed by a saline, he would have had infinitely better results in a fraction of the time, and he would not have run the risk of causing trouble with the calomel. Moreover, were he in the habit of so prescribing, he would have had the medicines necessary right with him,

When irritability of the stomach does not subside under well-appointed treatment and diet, copper arsenite comes in nicely.—Rice.

and they would have been exhibited there and then, the time lost waiting for the capsules would have been saved, or, if the doctor prepared them himself, his trouble would have been avoided.

There is nothing, there can be nothing, like "*the right remedy at the right time; given in small, repeated doses to effect!*" The "full dose" may be too small for "A" and it might, perchance prove altogether too "full" for "B." *Dose enough! DOSE ENOUGH!!!*



#### THE THINGS WE DON'T KNOW— BUT CAN LEARN.

The human body is a pretty intricate piece of mechanism and it is a question if any man, living or dead, ever perfectly understood each and every part of it. That such intimate knowledge might be acquired is possible, but it would take a full lifetime of constant work. Even then, most of the thousands of derangements to which the system is liable would remain untouched. So it is not to be wondered at that the most intelligent members of the profession lean towards specialism. One might manage to understand the normal and diseased or injured eye, ear or brain, (though the latter is somewhat doubtful), but to be really familiar with these and *all* the other organs in health and disease is out of the question.

The well-read and educated physician has, unquestionably, a good general idea of the diseases he treats, but time and time over he is compelled to treat some condition "on general principles," frankly acknowledging that he doesn't know what is the matter. Such a man, if conscientious, turns over eye, brain, and obscure diseases to specialists. But,



With violent purging nothing so quickly subdues pain and quiets as morphine gr. 1-100 and atropine 1-1000.—Edmunds, *Med. Era*.

strangely enough, he will in many instances attempt to treat the most difficult and obscure disorders of all. He has one man with gleet, half a dozen women with leucorrhea, several sexual debility cases and as many more pure examples of "nerves." He gives the first astringent injections, tampons or douches the second, rakes the market for aphrodisiacs for the third and drowns the fourth class with bromides and valerianates. Possibly he may vary things and use the electric current in some form for the whole bunch.

But alas! The results are not what one could wish them. And, if one thinks over the matter, how could they be? The gleet may be due to prostatic disease or disordered seminal vesicles; is it likely that injections *could* be of service? Again, even though the discharge be urethral it may have its origin in an infected lacuna, or there may exist a patch of granulations. The first will yield only to direct treatment, as with peroxide of hydrogen and silver nitrate, and the latter requires topical applications made through the endoscope. And so it is that a disease which would stop in ten days if properly treated by someone who knows, goes on for years to become a terror to doctor and patient alike.

If you treat the urethra and genito-urinary organs, study their diseases. The leucorrhea may be due to any one of a score of causes; there may be gonorrheal infection—unless the microscope is used how can one apply an effective remedy? If there exist laceration or granulation of the os how can tampons and suppositories prove useful?

Before you use either of these be sure of the condition you have to deal with. The sexual debility case may really be

Chorea is usually started by some reflex irritation—eyestrain, nasal irritation, tight prepuce, etc.—Quillian, *Mod. Eclect*.

potent but wrongly mated; on the other hand he may need the dorsal vein tied or a hypersensitive urethra attended to; the prostate may be hypertrophied or there may exist a vesiculitis which cannot possibly be cured. Again the entire disorder may be mental. Before you condemn yourself to failure be sure that you know *what* causes the debility. If you don't know and can't find out don't ruin the man's stomach with alleged aphrodisiacs.

And those nervous women. How many of us have really and truly cured our cases? If we have, it was either by chance or because we studied and watched and observed and drew conclusions till we struck the underlying cause. *That* known, the rest was easy. But the origin of hysteria and "nerves" in women may usually be found in the pelvis. In fact, if you are able to exclude spinal lesions or cerebral disease (and such seldom exist) you may be quite sure the *causa causans* lies below the waist. It may be a constricted sphincter ani; it may be an adherent clitoris, or a malposition of the uterus—any one of a dozen things.

But the point is *here*; if you are to cure the "nerves" you must find out what causes the derangement. Unless you can recognize the abnormalities named—with a host of others—how can you do this? Therefore, it behooves you, if you are going to accept the charge of such cases and really wish to do something for them, to study the pelvic organs and official sphincters. Get familiar with them in their normal state and you will recognize any abnormality existing in other cases.

We can't know it all—no one ever did



The editors all stop at "Liquozone is a solution of sulphurous acid," failing to see the obvious conclusion—study sulphide therapy.

—but we can remember how little we have been taught and keep on learning. Especially should we study those things, which, as we have found out by experience, we know absolutely nothing about. And *these* are only a few of them!



#### AN OLD FRIEND BACK FROM GERMANY.

That much-neglected but most useful surgical dressing, balsam of peru, is once more receiving attention and recommendation in the current medical press. Perhaps, *because* the idea "comes from Germany" many of our exchanges quote a writer in the *Munich Med. Weekly*, who describes his treatment of the wounds met with in emergency practice. He washes the wound with sublimate solution (a 1 to 200 solution of oil of cinnamon would be better) and then pours pure balsam peru over it, covers it with gauze soaked with the same substance and then bandages. This dressing is not removed and does not stick to the wound itself or become moist. Healing takes place under it with marked celerity.

The writer recommended a similar treatment in the CLINIC some months ago. The lips of the wounds are brought together after thorough washing with cinnamon water and while held in position balsam of peru is poured over the lesion. Into the fluid a piece of gauze a little larger than the wound is placed and allowed to "dry on." Aristol, euophen or any other good dusting powder may then be sprinkled over the wet surface, another piece of gauze wet with the balsam placed *in situ* and the whole covered with

Formic acid removes the sense of fatigue—so does veratrine, and the latter removes the causal toxins besides.



a few turns of a roller. This is perhaps the most thoroughly satisfactory dressing for small cuts and minor machinery lesions. The bandage may be removed after a day or two and the edges of the hardened mass of gauze clipped away from time to time till all is gone.

Ungt. resinæ and balsam of peru, one dram of the latter to an ounce of the former, may be applied to old sores with good results. This method will often succeed when everything else has failed to heal the leg ulcers of old people and scorbutics.



#### WHEN DOCTORS DISAGREE, WHO SHALL DECIDE?

Good men in the medical profession never disagreed more emphatically over the action of any one drug than over calcium sulphide. Thousands of men, conscientiously, and out of their experience, hold diametrically opposed views. Many say it is good. Many, with equal vehemence, declare it good for nothing.

Now, when doctors disagree, *who* shall decide? In this case it is the manufacturing pharmacist. Calcium sulphide that is rightly prepared and rightly passes the physician's hand to the patient (and having been rightly applied) will produce most satisfactory results; while under reverse conditions exactly the opposite effect is produced, any degree in either direction being determined by the measure of excellence or the measure of good-for-nothingness existing in the preparation.

Calcium sulphide begins to decompose the moment it leaves the utensils of preparation, and unless it is put imme-

diately into a dispensable and thoroughly protected form it grows steadily poorer and poorer until it finally becomes absolutely inert. The powder in the dispensing bottle of the retail druggist is especially open to criticism. The oxygen of the contained air oxidizes the upper strata to the extent that the amount ordinarily used for dispensing for a prescription is absolutely good for nothing. A freshly prepared tablet triturate may be good but it steadily spoils from air contact. The compressed tablet as usually made contains but a modicum of the desired strength.

The only calcium sulphide preparation that is therapeutically efficient is one that is made from fresh material containing from 60 per cent to 80 per cent of determinable sulphide, and so carefully made and so well protected that little if any odor can be detected on removing the cork from a bottle filled with such preparation, and from which, by chemical test, it is possible to determine that the condition still exists, and that calcium sulphide undisturbed may at any time be recovered, not over two to five per cent having been lost in the process of manufacture. *This is a calcium sulphide that will do business and this will decide the question, for doctors having experience with this preparation will all think alike.*



It is claimed that many Chicago druggists have been selling as aristol a compound consisting mainly of Fuller's earth, bought cheap from illicit dealers. But what of the doctors who have been using this and never suspected the difference? Seems as if our doctrine of so studying the symptoms and the effects of remedies that they may be recognized, is badly needed in some quarters.



Puerperal Sepsis: The sharp curette is the unloaded gun that is always killing some innocent.—W. W. Harper, *Mobile M. & S. Jour.*

"Go now and wash yourself" is a mandate every mother should give her physician; and give it with no negation.—Palmer.

# GLEANINGS FROM FOREIGN FIELDS

Translated by E. M. Epstein, M. D.

## CANNABIS INDICA, AND CANNABINE TANNATE.

**T**HIS alkaloid is not very much used in alkalometry. It claims its place only where other hypnotic alkaloids are not tolerated. Among others it is certainly useful in the treatment of gastralgias. Germain Sée has even denominated it, "the antigastralgie *par excellence*."

Cannabis is of the nettle kind. Cannabis sativa is dioecious. The male plants have terminal spikes, and the female plants have an inflorescence in the axillæ of the leaves. The cannabis of India has no morphological points to distinguish it from our cannabis, except that the former has a characteristically different content of resin.

The female plant elaborates in its inflorescence, during the season the only substance used in medicine. The resin which it secretes allows its inflorescence to form itself into a greenish-brown mass which is the substance called *hashish*, also *bhāṅg*, *bheng*, *sabzi*, *siddhi*, as synonyms.

The amount of the resin in the hashish which comes to Europe is twenty per cent. This resin contains:

1. A volatile alkaloid called *cannabinene*.
2. Non-volatile alkaloid called *tetranocannabinene*.
3. A brown, amorphous resin, insoluble in basic bodies; this is called *cannabinene*, or *hashishine*.
4. An essential oil called *cannabinene*, which is a carbide (carburet) of hydrogen.

5. A crystallized body also called *cannabinene*.

The tetranocannabinene acts like strychnine. It is not found in any of the preparations of Hashish.

Finally the cannabinone of commerce is an amorphous, resinous, bitter mass. This is the cannabinol of English chemists.

The commercial tannate of cannabinene is very little active.

Cannabinene is poisonous in high doses, but has been very little studied.

Indian hemp preparations act upon the brain, hence its employment as an hypnotic. They have also a local anesthetic effect on the stomach. It is also used for the same reason in plasters and collodions to destroy corns.

For the alkaloidotherapeutist the effect of Indian hemp on the brain is of great interest.

Morphine, hyoscine, and atropine act on the sensible and psychomotor neurons. But Indian hemp, while it also affects the sensible neurons, affects also at the same time those neurons whose complexes form the organs of the sensations of pleasure and displeasure, which accompany our actions, volitions, perceptions, sentiments, and most of our psychic actions. These sensations of pleasure and displeasure play an immense part in our lives. The first is the optimism and the joy of life and the cheerfulness of labor, the other is the characteristic of melancholics, and of bruised hearts.

The action of Indian hemp seems to show that there is a distinct organ for the sensation of pleasure and another for that of displeasure.

This special action on these precise cerebral regions makes it that at the present time two hundred millions of human beings have given themselves up to Hashish for the last two thousand years. The use of this seems to have come from Asia Minor, and thence it spread to the Indies and to Africa. The negroes of the Congo, the Hottentots, the Makololos and Damaras have that passion for this poison which marks the coolies of China, and the millions of Hindoos.

Lewin gives a complete and touching picture of the pharmacological effects of Hashish.

It was often said that Hashish excites first of all the genital functions. Erotic representations may indeed traverse the dreams which the smokers and eaters of hashish procure from it. At first the genital functions may be exalted, but there is no more of this during the ensuing paroxysms and at the ending of the toxic effects. Smaller doses make a person gay and at times provoke convulsive laughter.

Stronger doses produce a delicious sensation accompanied by psychic actions. All ideas are, as it were, lit up with sunlight and leave a luminous track behind them in the brain. Every movement becomes a source of joyfulness.

The sensation of the Hashish eater is not analogous to that of the gourmand who partakes of a good dinner, or of a starveling who has found enough to eat his fill. No, he is as happy as one who gets hold of a good novel. He feels what the miser does when he counts over his

treasure, what the gambler feels when chance has favored him, what the ambitious person feels who met with success.

All the senses gain in acuteness. The auditory sense is no longer merely proportionate to what the sound waves produce. The ear hears harmonies when none have taken place. One single luminous ray becomes a bright sun, and that sun irradiates a paradise of the greatest voluptuousness.

In this condition the eater or smoker of Hashish feels that he has no body, and the notions of time and space no longer exist for him. At times somber ideas take hold of the intoxicated one. The African smokers do not sleep as others do after the sensations described above have passed off, but are rather excited, and their talk becomes a rapid and tumultuous current of words without any sense, whose phrases are short cut.

Persons of this kind are but little agitated. A great agitation takes hold of Europeans only, who dare partake of this poison.

These cannabists dance an infernal saraband in the room where they are. Their ideas veer about so quickly that they cannot be fixed for a single instant. Their speaking acquires an incredible volubility. European cannabists creep sometimes on all fours, and though conscious of what they are doing, they show no inclination to do otherwise. I have seen myself, some twenty years ago, two students who, after smoking Hashish, abandoned themselves to the making of such exercises in the streets of a little village, which astonished their population. One of these leaped, with his feet close to each other, over a boundary stone



Soda bisulphate is a non-toxic intestinal antiseptic; keeps mouth clean, prevents tympany, lessens diarrhea, aids digestion.

Watch the chest in old people. Hypostatic pneumonia or congestion is a severe and dangerous complication.—Stickney, *Jour. Surg.*

and imagined that he cleared the Alps at a single bound. The other one strode over a puddle of water and believed he had crossed a lake. At last they went to their room and demolished a crockery pan and used the pieces as projectiles.

Chronic cannabism produces devastations in the body and in the brain analogous to those which opium does.

The tannate of cannabine acts in about half of the cases as a hypnotic. Its frequent side-effects are (in a dose of Gm. 0.1—0.5) vomiting, insomnia, and restlessness. (See Lewin, *Nebenwirkungen der Arzneimitteln*.) Observed also were dryness of the mouth, and increase of pulsation, smallness of the blood wave, collapse, and loss of consciousness. The skin becomes insensible, and the patient feels the horrors of death. Delirium and hallucinations are frequent. One patient imagined he vomited fire, and another made suicidal attempts.

Lastly the nervous system becomes either benumbed, or, just the contrary, it reacts with an extraordinary motility, or with convulsions.

The frequency of these alarming symptoms makes cannabine a dangerous medicament, which when demanded should be administered dosimetrically only. This measure of precaution will not prevent frequent failures in the sense of rendering this medicament altogether null. I repeat that the employment of cannabine is only a makeshift. It is not to be employed except in extreme and rare cases, where our great alkaloids and their combinations (as morphine with hyoscyamine and strychnine, or hyoscyamine with cicutine, strychnine and cocaine) are either not tolerated or remain without effect.

The Charles Chanteaud dosimetric



In the medical profession are four classes: Routinists, earnest workers and lazies.—*Medical Forum*.

granule of cannabine tannate is dosed at one milligram. [The American alkalometric granule of cannabine, is also of one milligram, gr. 1-67. The tannate is not used.] Two granules at twenty minutes' interval, until effect, will usually suffice. [We are more cautious in this country, directing three to six granules every two hours, but may require larger doses.]

More than twenty granules should not be given in twenty-four hours, and their administration should not be prolonged beyond three or four days.—Dr. R. Tissot, in *La Dosimetrie*, March, 1905.

For further information, see "A Text-Book of Alkaloidal Therapeutics," second edition, 1905. And for a vivid description of the hallucinations, see Wood's *Therapeutics*, eleventh edition, 1900, p. 163.



#### SCOPOLAMINE IN PARKINSON'S DISEASE.

Marie and Roussy presented a patient to the Société de Neurologie, in whom a subcutaneous injection of scopolamine ameliorated all the symptoms of the above disease within twenty-four hours. M. Alquier remarked that the action of scopolamine is comparable to that of hyoscine hydrobromate, but the amelioration from the medicaments is of short duration. Moreover in Parkinson's disease, which shows intense vasomotor troubles the signs of intolerance show themselves at the end of some injections. M. Sicard interposed the question, if there was not here the phenomenon of Anaphylaxy (drug sufficiency) which must be taken into account, and it is this that commands extreme prudence in

The *National Druggist* says Judge Gayner's decision did not permit druggists to alter at will the physicians' prescriptions.

the use of these medicaments.—*Gazette des Hopitaux*, June 15, 1905.

Concerning the use of formic acid in trembling affections, M. E. Clement, gave as his own experience, to the Academie des Sciences, May 1, 1905, that no medicament, not even hyoscyamine, acts so clearly as formic acid. He does not dare yet to affirm anything of its action in Parkinson's disease (paralysis agitans). There is much hope that it will give favorable results in chorea, or in certain of its forms.—*Gazette des Hopitaux*.



#### SENILITY AND GASTRIC FUNCTION.

Tartarini-Gallerani made a study of the subject in the title on seventy old people, who were well and had no notable gastric troubles. He came to the following conclusions:

1. The secretion of HCl may be normal in old people, but it is frequently feeble, yet never to a point of achlorhydria.

2. He always found the presence of pepsin and gastric steapsin, but in very variable quantities. At times too he found the amount as high as he ever knew them to be, and this too when the HCl was free, but not exceeding the normal. Admitting, therefore, that there is a certain relation between the hydrochloric acid secretion and those of pepsin and lipolytic (fat-dissolving) ferment, it is impossible yet to admit the existence of a direct proportional rapport between these divers secretory functions.

3. The motor activity of the stomach is languid in old people. It is confined to the point where ordinary signs of gas-

tric insufficient motility begin to manifest themselves.—*Gazette des Hopitaux*, No. 46, 1905, p. 548.



#### A CASE OF TETANUS TREATED WITH HYPODERMIC OF ESERINE.

A horseshoer, nineteen years old, was attacked with tetanus three days after getting a small sore on one of his feet. Repeated subcutaneous injections of antitetanus serum had no appreciable effect. The patient grew worse, and recourse was had to subcutaneous injections of eserine salicylate, half a milligram, (about grs. 1-134) repeated four, five and six times in twenty-four hours. It resulted in a progressive amelioration, and in the end of three weeks recovery was complete. This method, though not used, deserves attention. It is possible that the contraction of muscles being overcome, there is a spontaneous cure of the subacute tetanus.

It is to be noted that there was no eserine intoxication, the ordinary limit of six milligrams not having been reached.—*Gazette des Hopitaux*, No. 25, 1905, p. 298.



In parenchymatous nephritis, Vidal and Javal showed, in a case which they have observed for two months, that the addition of sodium chloride to the food aggravated the case considerably, and produced edema, which disappeared when the salt was reduced. The favorable influence of a milk diet in this disease is ascribable to the small amount of chlorides in that diet. But other diets may also be prescribed with careful avoidance of table salts.



Procrastinating medicine has undoubtedly killed more people than rash surgery.—Quintard. Why procrastinate more than in surgery?

Since malaria parasites require two hosts, mosquito and man, for sex maturity and propagation, mosquitoes alone transmit them.



## MISCELLANEOUS ARTICLES

### DIET AND HYDROTHERAPY IN TYPHOID.\*

I HAVE the pleasure, today, to present to you a consideration of two forms of treatment which are of the utmost value in typhoid, namely, the dietetic and the hydrotherapeutic.

For many years it has been recognized that there were other methods, as valuable or more so, than drugs in the treatment of typhoid. But the facts were isolated and practically valueless, each man formulating a system for himself. Our knowledge of dietetics and hydrotherapeutics has, however, been crystallizing within the past decade or two, until now we have a definite dictum in these matters which gives them an importance heretofore unknown.

In discussing these methods I will take up first the dietetic and afterward the hydrotherapeutic.

\*One fact upon which all agree is that all cases of typhoid demand a fluid diet during the continuance of the fever, and for a few days after the temperature becomes normal. Most authorities are agreed that the proper diet should consist entirely of milk, varied only as necessity arises. This is objected to by some, but represents the consensus of opinion. As to the form and mode of administration there is less unanimity of opinion, Thompson advising that it be given whole and undiluted, while Osler states that it should always be given diluted, and so on. Personally, I be-

lieve that the best results follow when the tastes or whims of the patient are followed in this respect, so far as may be. Thus, the milk may be given raw or boiled, cold or hot, diluted or undiluted, according to the taste of the patient.

It is sometimes of service to have the milk partially or wholly peptonized, and in cases where the curds of casein seem to pass undigested, the milk may be curdled first and then shaken back to a liquid before giving. If the patient complains that the milk tastes flat, this may be overcome by adding a few drops of caramel or a teaspoonful or two from an ordinary cup of coffee. If the objection is still raised, the milk may be temporarily substituted by whey, butter-milk, koumyss, matzoon or any of the other prepared milk foods.

In some cases the milk disagrees, and when this is so it is manifested by one or more of the following symptoms: (1) A heavily-coated tongue; (2) constipation; (3) tympanites; and (4) diarrhea, with milk curds or fat in the stools, which should be examined daily when a patient is on a milk diet. When these symptoms appear it is necessary to replace the milk by a diet of broths and raw eggs. The broths may be made of mutton, chicken or beef, and should be made in the form of a consomme, free from fat and other solid material.

Dr. H. B. Whitney, of Denver, has given us the formula of a soup, upon which he fed seventeen patients, with

\*Read before the Noble County (Indiana) Medical Society, May 2, 1905.

great freedom from gastrointestinal and other disorders.

His soup was made as follows: He placed five pounds of meat in ten quarts of water, brought it to a boil and skimmed off the fat. He then added one pound of pearl barley and cooked the whole for six hours, after which it was strained and seasoned. Of this soup he gave 40 ounces between 7 a. m. and 7 p. m.

When eggs are given they may be beaten up whole with milk or water, or in the form of albumen-water. This latter is made by straining the whites of eggs through a cloth and mixing with an equal quantity of water. This may be flavored with lemon, and, if alcoholic stimulants are being given, this serves as a very useful and pleasant vehicle.

If milk disagrees and the patient tires of broths it is well to try the farinaceous gruels, such as are made of arrowroot, Iceland moss, or the prepared infant-foods, as Mellin's food, malted milk, etc. If emaciation is extreme a little malt extract may be added to the diet, and the milk should be peptonized to insure its prompt absorption.

Nourishment should be administered every two hours in the day, and in cases where nutrition is greatly interfered with, in the night also. In mild cases or those where the patient has difficulty in going to sleep after being aroused, it is better to omit two or three feedings during the night.

The food should always be weighed or measured so that an accurate record of the quantity consumed may be kept for comparison with the quantity of urine voided and other symptoms.

When convalescence commences the diet must gradually be changed. For

from three to eight days after the subsidence of the fever, according to the case, the strict liquid diet should be continued, after which the semisolid and later the solid foods may be gradually added. During the transition from liquid to solid diet, the following are some of the most useful foods: junket, custard, soft boiled eggs, milk toast, boiled rice, scraped beef and many other items which will suggest themselves to the thoughtful physician or may be suggested by the patient, subject to the physician's approval.

Frederick Shattuck, in the *Boston Medical and Surgical Journal* for February 5, 1903, reports results in a series of 563 cases which he saw. About half of these he kept on a strict milk diet and the other half he allowed a more liberal bill-of-fare, including some semisolid foods. The mortality in the whole series was but 8.8 per cent, and he reports that he likes the more generous diet better and that the patients seemed to stand it better than the exclusive milk diet.

Thus we see how opinions vary, and can understand that in this matter of diet during convalescence, it is necessary to use the utmost judgment. It is sometimes a consolation to the physician to remember that typhoid is essentially a relapsing disease, and that about 10 per cent of all cases suffer a relapse, no matter how carefully the diet is regulated. If a relapse does occur the patient must at once return to the milk diet.

The key-word of this subject of dietetics is, "Watch the bowels."

We will now take up the consideration of hydrotherapy.

The use of water, externally and in-



Mosquitoes of 21 species, six genera, have been shown to be efficient hosts for the malarial parasites.—Dupree, *N. O. M. & S. Jour.*

Mosquitoes of eleven species have been shown to be incapable of serving as hosts for sexual stage of malarial parasites.—Dupree.

ternally, is not an invention of our own generation. It was not a new idea even at the end of the eighteenth century, when James Currie wrote his "Medical Reports on the Effects of Water, Cold and Warm, as a Remedy in Fevers and other Diseases." In this country it was warmly recommended, years ago, by Nathan Smith, of Yale.

Cold water may be used in typhoid in three different ways, namely: sponging, the cold pack and the cold tub. This latter is the most widely used and most successful method, and was introduced by and bears the name of Doctor Brand, of Stettin.

Many, even in the profession, believe that the sole or primary purpose of the cold bath is to reduce temperature. This is not so. In typhoid we have a virulent toxemia to deal with, and this manifests itself in two ways, that is, by pyrexia and by central nervous disturbance, evidenced by delirium, stupor, subsultus tendinum, etc.

The former is most emphasized, but, in most cases, is by no means the most important. While the high temperature is a thing to be deprecated and dealt with vigorously, it is in the cases with profound nervous symptoms that we feel most alarm and the greatest necessity for quick, safe, and sure methods of fighting this insidious foe.

The whole object of dietetics is to minimize the amount of toxins elaborated in the body, while that of hydrotherapeutics is to annul, so far as may be, the effects of those which are already there and those which are developed in spite of our best efforts. This it does in two ways. The cold water lowers the temperature directly, by the abstraction of heat, and indirectly by its effect on

the central nervous system. That the temperature-reducing effect is not wholly direct is evidenced by the fact that the temperature continues to fall for an hour after the patient is removed from the bath.

This effect on the central nervous system, then, is the primal object of the bath, because it quiets the nervous symptoms and improves the tone and equilibrium of the whole muscular system, thus improving the functions of all the organs and thereby causing a lowering of temperature and the amelioration of all the unpleasant symptoms.

Favill defines the cold tub as "A vigorous and systematic friction of the whole body, administered under cold water." To some this definition may seem to emphasize the friction unduly, but I assure you, gentlemen, that it is impossible to do that. The cold bath with friction is life—without it, death. The double stimulus, mechanical and thermal, awakens the flagging energies to renewed life and fits the sufferer to make a winning fight with his powerful foe.

The technique of the Brand bath or cold tub is as follows: The tub, having a length of 6 feet, a width of 24 inches and a depth of 18 inches is elevated one foot above the floor on wooden blocks, to facilitate the handling and rubbing of the patient. The tub is then filled sufficiently full of water to completely submerge the patient, and a rubber cushion is placed in the bottom to protect the buttocks. The patient, covered by a loin cloth, is then lifted from the bed and placed in the tub, where he is rubbed constantly by two nurses during a period of fifteen minutes. While in the tub the head is supported by a



Yellow fever that has visited Louisiana 95 times since 1893, need no longer be dreaded. —Dupree, *New Orleans M. & S. Journal*.

Mosquitoes are the principal if not the sole transmitters of the causa morbi of yellow fever.—Dupree, *N. O. M. M. & S. Jour.*

head rest, and cold water is poured over it during the entire time of the bath.

While the bath is in progress a third person should prepare the bed. This is done as follows: Over the bed is placed a large rubber sheet, and over this a blanket.

When the patient is removed from the bath he is wrapped in the blanket, quickly rubbed dry and finally covered with the usual bedclothes. He is then given a cup of hot milk, malted milk or some other nourishing drink and left to rest. This procedure is repeated every three hours in the day if the temperature rises above 102.5° F., and in severe cases, in the night also, unless other symptoms contraindicate it. In most cases it is advisable to give half an ounce or an ounce of whisky twenty or thirty minutes before the bath, so that it will have time to take effect before the bath begins.

This, in brief, is the typical Brand treatment. It may be modified in various ways to suit special cases. For instance, if a patient has a particular horror of the cold water, he may be put into the bath with the water at 80 or 85° F., the water then being cooled to 70° F. as rapidly as desired.

In sponging the water may be tepid, cold or ice cold, according to the height of the fever and the nature of the case. The bath should take fifteen or twenty minutes. This procedure is a good alternative for the tub, when the patient or his friends protest against the latter procedure. In children and very weak persons the sponging may be done limb by limb and then the back and abdomen, but in any case the friction must be applied continually.

The cold pack is less serviceable, but

may be used in some cases where the tub is not available. It is performed by enveloping the patient in a sheet wrung out of water at 60 or 70° F. and then sprinkling water over him from an ordinary watering pot.

These, then, are the rudiments and outlines of the great and growing science of hydrotherapy, as applied to the particular disease under discussion. The question arises naturally, and as a matter of course, what have these methods done to modify the course and mortality of this grave disorder? To the first part of the question, a host of grateful patients will cry, "It has given us ease and comfort, where before were pain, restlessness and the horrors of delirium." To this those of us who have tried this form of treatment will subscribe with no uncertain voice. When you have once seen a moaning, twitching, delirious patient, with lackluster eyes and lips caked with sordes, restored by two or three baths, as by a miracle, to rationality and comparative comfort, you will be a convert to hydrotherapy.

The most unpleasant feature about the tub is the violent shivering into which it almost always throws the patient. This, however, is transitory, usually relieved by a hot drink after the bath, and, after all, a very small thing to set over against so many important ones.

As to mortality, there is a very significant similarity in statistics. All agree that the serious complications, such as hemorrhage and perforation, are not increased by the Brand treatment, while the death-rate is lowered in a remarkable manner.

During our civil war, 74,000 cases gave a mortality of 35.6 per cent. 80,000 French cases, collected by Jaccoud,



Fomites and filth have no etiologic influence whatever in yellow fever; transportation in clothes relates to mosquitoes only.—Dupree.

*Stegomyia fasciata*, the only mosquito known to transmit yellow fever cannot survive a Louisiana winter.—Dupree.

furnished a mortality of 19 per cent. In the Pennsylvania hospital for twenty years, previous to the introduction of the Brand bath, the mortality averaged 19.2 per cent. In private practice, of course, the death rate was lower, running from 9 to 12 per cent.

The Brand treatment in Germany, where the disease is milder than in this country, has reduced the mortality to two, and even to one per cent. In this country the death rate under the Brand treatment is very uniform. Osler gives 7.5 per cent; Tyson, 7.3 per cent; J. C. Wilson, 7.25 per cent; Thompson, 7.75 per cent, and so on indefinitely, stopping only to give one convincing contrast, reported by F. E. Hare, from the Brisbane hospital, Australia. Of 1,828 cases treated by the general or expectant plan, 14.8 per cent died, while under the Brand treatment, of 1,902 cases only 7.5 per cent died.

In closing I cannot do better than to quote the words of Dr. H. B. Favill, when he says, "The natural history of typhoid under tubbing is not the same as without it. It is impossible to modify the course as to time, but it is beyond power to describe the difference in type between the untreated disease and that treated by tubs. This amelioration of the course of the disease, the improvement in the condition of the patient throughout, is sufficient reason for the use of the tubs, even were there no improvement in the mortality."

GEO. B. LAKE.

Wolcottsville, Ind.

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With the excellent advice given by Dr. Lake on the dietetic treatment of typhoid fever we are in full accord. We are also glad to present this succinct statement



Insects reared from eggs of yellow fever infected *Stegomyia* do not carry the infection; bovine malaria passes to the eggs.

of the advantages of the Brand method of treatment, which is certainly a decided improvement upon the expectant and do-nothing plan which too generally prevails. But Dr. Lake presents only the rosy side of the picture. In spite of the general indorsement which has been given this method by medical writers the Brand bath has never become popular in this country and never will. Outside of the larger hospitals it is seldom used, even by its advocates. The reason is this: unless it is well given it is worse than useless—actually dangerous. Portable tubs and other paraphernalia not to be generally had in general practice are essential; trained help and plenty of it must be constantly at hand, two thoroughly competent trained nurses being necessary to give the friction upon which reaction depends. The bath without this friction, as Dr. Lake well says, is "death." It has also been repeatedly pointed out that there are many persons who do not bear well the tub treatment. Most young children, the nervous, those of weak circulation, not only suffer serious discomfort but often fail to react properly—come out of the bath shivering, cyanosed, presenting all the symptoms of shock and have to be dosed with whisky "to warm them up." The Brand bath is well enough in men of the pink of condition like German soldiers, but how many of your typhoid patients are in this list?

There is another thing to be thought about concerning this method of treatment. Its aim is to combat the consequences of the intense toxemia of typhoid fever, to tone up the heart and other organs that are being poisoned. It does nothing to prevent the formation of these poisons, to remove the cause of

Mosquitoes ingesting yellow fever blood require at least twelve days before they can transmit the infection by bites.—Dupree.



the disease. Common sense should tell us that the most rational treatment is the one which will prevent or at least check somewhat the manufacture of the deadly toxins which are responsible for the symptoms. That is the reason why we recommend the use of the sulphocarbolates. Why not treat the disease itself instead of the consequences of the disease? There can be no question that the typhoid process commences in the intestinal tract; here the typhoid bacilli implant themselves; here are elaborated the poisons which cause the trouble; most of the symptoms are referred directly to this area; and the dangerous complications such as hemorrhage and perforation, are due to the progress of the local disease, which the exclusive bath treatment would allow to go on unchecked.

We have said so much about the sulphocarbolate treatment of typhoid fever in the CLINIC that it hardly seems necessary to repeat it. But, we not only believe it to be the most rational method of treating this disease, but we *know* that it is effective—that if commenced early and pushed energetically it will cure every curable case, and that without discomfort to the patient or the necessity for the often impossible “advantages” of hospital and trained nurse. The sulphocarbolates can be used successfully in hovel or hut, in a hospital or a lumber camp, at any age or in any condition. Thousands of the CLINIC family can tell of the clearing up of dangerous, apparently hopeless cases, when the administration of the sulphocarbolates was commenced.

Hydrotherapy has its uses in typhoid fever, but it should be used in well selected cases as an adjunct to other and

more rational methods. It is not “the whole cheese,” and never will be.

We want to compliment Dr. Lake upon his splendid paper, which gives one of the best brief reviews of hydrotherapy in typhoid we have seen. And we endorse the hydrotherapy—as far as it goes.—Ed.



### TYPHOID FEVER.

The *Medical Era* for June, contains a lengthy symposium on typhoid fever that is well worth our attention.

The general acceptance of the CLINIC's slogan, “clean out, clean up and keep clean,” is well evidenced in its application—in fact the thread runs throughout. Some papers are general and expectant, others progressive, alkaloidal, but all show an advanced type of thought along this line. We quote the paper of Dr. J. R. Phelps of Dorchester, Mass., and a brief resume by your editor, only regretting that we cannot give space for at least an exhaustive digest of the whole thing.

Dr. Phelps says:

I took down my books today and re-read what they had to say about typhoid fever, but I soon found my head swimming. But I remember of a man who lived in Bampton, England, a parson, who remembered the injunction of the Master to “heal the sick” as well as “cast out devils” and experiment on souls. He details one case of a boy who fell sick during an epidemic of “putrid fever,” to whom he administered all the known remedies, but finally found himself obliged to prepare the mother for the loss of her boy. While talking to her his eye fell on a tub of yeast working, and he remembered curing a piece of putrid meat once by holding it over a tub of fermenting yeast. He instantly gave



Mosquitoes infected by yellow fever probably retain the power of transmitting it for their subsequent lives.—Dupree.

The infective principle of yellow fever exists in the patient's blood only during the first four days of the attack.—Dupree.

the boy two tablespoonfuls, and told the mother if he was helped by it to repeat it every three hours, and he started on a four days' journey. On his return he was informed that the boy had recovered, and going to the house to inquire, the boy himself opened the door. The improvement began after the first dose of yeast, and the boy was soon well.

The man, Dr. Cartwright, details several cases in which the patient was almost in *extremis* which yielded to this remedy, and in one case alternated with cinchona.

This may sound like "grannyism," but grannies are not to be despised, and I notice that Dr. Waugh speaks well of it.

*En passant* let me say one thing: All the men of whom I learned what I know of therapeutics were violent opponents of mercurials in every form, and I imbibed their dread of this drug. But some years ago I ran up against that alkaloidal crowd out in Chicago, and they led me into strange ways. And I have become a convert to the belief of old Dr. Ira Warren, of Boston, that "in case of almost every disorder the eliminatory functions of the system should be set in action, and no drug sets them into greater activity than calomel." I don't mean the heroic doses of our ancestors, who could not conceive of any therapeutic action of calomel being established unless a man's intestines followed their contents out into daylight, or his teeth rattled in his mouth like bone buttons in a pair of celluloid cuffs. No, I don't mean any such thing. And now I will detail one case, and that outlines my procedure in every one, always counting, however, on certain idiosyncrasies of patients.

One evening I was called away from a social party to go at once to a suburban city some six miles away. I arrived there about ten o'clock and found my patient, a girl of twenty, in a high fever, violent nausea and profuse diar-

rhea. The excrement was mixed with blood, some membrane, and horribly fetid. It had been kept for my examination, but one look was enough, and I threw some permanganate of potash in it and ordered it out and went to work. I took out ten tablets of pink calomel, gr. 1-10, and gave one at once, following it in five minutes with a 3-gr. tablet of sulphocarbolate of calcium. I gave the calomel at 15-minute intervals, with 1 gr. of calcium sulphocarbolate between. In an hour there was a marked improvement in the feces and decrease of pain, and the nausea was gone. I left orders for the calomel tablets to be taken every quarter hour, with a 1-grain tablet of sulphocarbolate between. I left a 2-dram powder of saline laxative to be taken an hour after the last calomel tablet, and with directions for a 1-grain calcium tablet every hour until I returned, I went home. The mother asked me if I wasn't going to leave something for the fever, but I told her that the fever would subside after the disturbing cause was out of the way.

The next morning at eleven o'clock I was there again, and the patient greeted me with a broad smile. She had "had some movements." Well, yes, rather; but the offensive odor was gone. She wanted some breakfast. I asked her what she wanted, and she replied: "A lamb chop and some spinach." I told her not quite that, I preferred corned beef and cabbage, and some turnips and beets, but as the case stood I thought a little malted milk would be best.

Well, I told the girl if she would follow my directions to the letter (and this was Tuesday), she might have some spinach on Friday. I left more calcium sulphocarbolate and some powders of quinine hydrochloride, gr. 1-100, to be taken every three hours. This salt of quinine is my favorite, and I am indebted to Dr. Waugh for the suggestion. And then I went away, wondering what sort of a hole I had

Temperature below 55° F. inhibit or destroy the virus of yellow fever blood; the germ is a protozoon.—Dupree.

Culex mosquitoes are probably responsible for the infection of men by dengue, as shown by Graham at Beyrout.—Dupree.

put my foot in by promising her spinach for dinner Friday. Well, during the day I took down "American Alkalometry," and read an article on "Diet in Typhoid Fever," by Dr. Waugh, and found warrant for my promise to the girl. Wednesday and Thursday she continued to improve rapidly, and Thursday afternoon she was sitting up with her sweetheart. I told her mother to get a nice lamb chop for her the next day, and remove all of the fat, and cook her some spinach and give it to her. Friday evening I made my last call, and found her playing euchre with her intended, and no bad effects from the spinach. But I was confronted with another problem—they wanted to be married in three weeks, but I postponed my decision. They did it, however, and she is now a happy wife and mother in a city twenty miles away.

Well, I may have been prolix, but I am nearly through. What I want to insist upon is, that a case of typhoid, taken in its beginning, and treated on the principle of "clean out and keep clean," is a very manageable disease and of short duration. As I said, I never let it get away from me. If I find an advanced case, I send it to the hospital, of which we have enough hereabouts to ruin the profession.

The only sulphocarbolate I use is calcium. I much prefer it to sodium, and vastly prefer it to zinc. It works well for me. I am an admirer of old Paracelsus, who said of lime: "Many a man kicks away with his foot a stone that would be more valuable to him than his best cow, if he only knew what great mysteries were put into it by God by means of the spirit of nature."

I have sometimes found baptisia a useful remedy in typhoid dysentery, but one of the best things is a new (to me) remedy called eusoma. It is a compound of echinacea, thuja and baptisia. I find it a valuable antiseptic, both as an external and internal remedy.

It is well worth the notice of the profession.

This is a thoughtful paper, somewhat out of the ordinary as might be expected, for Dr. Phelps is no ordinary man. It's good suggestive reading.

The following by your editor may be useful as a reminder. It is merely a condensed abstract of the general principles for the proper handling of typhoid fever that we have before so fully laid down:

BY W. C. ABBOTT.

It is not easy for us to say anything new on the treatment of typhoid fever, because the methods we have employed for twenty years continue to give such good results that we have no reason for exchanging them for any more recent. New things are not necessarily better than their predecessors, but many a useful method has fallen into oblivion because pushed out of sight by later, though less deserving, competitors. Let this be my excuse for coming before you with an old story, a twice told tale.

When we commenced using and advocating the intestinal antiseptic method of treating typhoid fever, it was not looked upon with favor. Some reaction against Listerism was then perceptible, and the impossibility of securing the absolute destruction of all microorganisms led to the rather inconsequent conclusion that all attempts at that object were useless. But the weight of experience was too overwhelming—the enormous gains in surgical results from the partial and imperfect asepsis attained spoke too strongly to permit a return to the ancient filthy technique.

In medicine, however, the reaction prevailed, and the admitted impossibility of rendering the entire alimentary canal aseptic threw discredit on all attempts in that direction. The method was unpopular, its advocates condemned as unscientific and scant courtesy accorded them. That the method survived is due



An acute fever attacks the unacclimated in Herzegovina at the onset of the mosquito season—mosquito fever.—Dupree.

Filaria are transmitted to man by nine species, three genera, of mosquitoes, prevailing as far north as Charleston.—Dupree.

entirely to the much-derided general practitioners, who clung to their clinical results and awaited the progress of science to an explanation of the unquestionable benefits obtained.

There is a good thing in the right place, but it has no force with the clear thinking, hard head—the “man from Missouri.” He has to be shown more than once to be convinced that the thing that he knows isn’t so, and then, thank God, he won’t believe it, but will go on curing his cases just as he has. He uses the sulphocarbolates! He knows they are good!

Let me briefly recapitulate the routine found most suitable:

As soon as any symptoms render the presence of typhoid fever probable, begin by clearing out the alimentary tract; give calomel, gr. 1-6, with or without a small dose of podophyllin, every half hour for six doses, swept out by a dose or two of saline laxative, given several hours later. Follow with the compound sulphocarbolates, 2 to 15 grains every two hours until the stools are free from unpleasant odor; then often enough to keep them so. By this time the symptoms will have so far subsided that the attack is reduced to the category of mild or even abortive typhoids, the results being better the earlier and more thoroughly the treatment is instituted.

This being the specific or dominant treatment, the remainder is symptomatic or variant. The circulation is equalized by the use of aconitine to relax vascular tension and digitalin to restore vascular tone, each affecting those portions of the vascular tract where its influence is indicated to restore normal equilibrium. The heart is further strengthened as needed and the vitality incited by strychnine arsenate, or the eliminants stimulated by veratrine, according to the prevailing indications. Insomnia may call for a little hyoscine, nocturnal delirium for zinc valerianate, ulceration for turpentine, hemorrhage for atropine and cornutine, deficient leucocytosis for nuclein, pulmonary involvement for san-

guinarine to incite the vitality of the pulmonary tissues, etc., but in truth the intestinal antiseptics so generally do away with these and other complications and sequels that we have to go back to our pre-antisepsis days to recollect them. But for every abnormal phenomenon of typhoid fever there is a remedy—one better than any other—and we follow the indications presenting in each case instead of simply treating a “typhoid.”

The results are all we can wish. Of course, the hygiene of the premises is cared for, diet and cleanliness insured, etc., but as to these there is no difference of opinion. The physicians who employ this antiseptic method are, as a rule, believers in the possibility of aborting typhoid fever; those who do not are skeptical. Each of us sees with his own eyes—appreciates his part of the elephant.

Probably the majority of the *Era's* readers are familiar with this method—to those who are not we would say, you do not know what you are losing.

The heat and decomposition of the summer will again cause the visitation of typhoid fever and we sincerely trust that CLINIC readers will be found better able to treat it than ever before—more deeply convinced, through experience, of its abortability, under proper handling and determined to so handle it as to effect this most desirable consummation.



#### THE SULPHOCARBOLATES IN TYPHOID.

The CLINIC is a very welcome visitor. I get more help from it than all the other journals combined, and I take quite a number.

I have treated eight cases of typhoid fever with the sulphocarbolates with perfect recovery and no complications.



It will yet be shown that the parasite of Bilharzia disease is disseminated by the mosquito—anopheles.—Dupree.

The student plotting mosquito extermination must be appalled at the magnitude of his task when he contemplates the facts.—Dupree.

After cleaning out the intestinal tract with calomel and saline laxative I gave the intestinal antiseptic until the stools were deodorized when the temperature always dropped two or three degrees, and I had no trouble maintaining it at this point. To support the heart and maintain the strength I gave triple arsenates with nuclein. The diet consisted of diluted milk in small quantities at two hourly intervals.

J. W. TOMLINSON.

Seward, Mich.

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Now is the time to prepare for the typhoid fever season. Forewarned is forearmed! Dr. Tomlinson has had experience with the sulphocarbolates (as well as some thousand other doctors) and he naturally pins his faith to these salts. So do we. We reassert what we have said so many times through the columns of the CLINIC that the sulphocarbolate treatment will abort or cure the vast majority of these cases. You can not afford to be ignorant of a method which cures practically all, while others are losing from 10 to 25 per cent. Get the volumes of American Alkalometry and see what others have done. Do it now, brethren!—Ed.

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#### DYSMENORRHEA.

The following case presents no unusual features, but from the therapeutic standpoint it is of interest because it furnishes an illustration of the ease with which the application of "active principles" brought about a state of relief from a series of very distressing symptoms not amenable to old-fashioned methods.

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Mosquitoes must have waged successful war against natural enemies under adverse conditions at least since Perbeckian period.—Dupree.

E. A., aged 15, had been suffering for four years. She began to menstruate at the age of twelve; since which time she had been having a very irregular appearance of the menstrual flow, varying at intervals from six weeks to two months. There was a great deal of pain in the right groin, especially for several days preceding the appearance of the menses. The discharge when it came, was said to be of a bright color and normal in quantity. There were frontal and temporal headache, dizziness, a sense of pressure in the epigastrium after eating, a dragging sensation in the back, and obstinate constipation. The patient did not sleep well, frequently "jumping in her sleep."

In appearance, the patient was a robust looking girl, though the color of her skin was rather pale and there was considerable of an acniform rash about the face, the forehead especially. The tongue was thickly coated; pupils widely dilated, but responsive to light and with normal accommodation. Vision 20:200 in right eye; 20:20 in left. There was considerable tenderness upon pressure in the right groin.

Treatment: Concerning diet; sweets, starches, fresh breads, tea and coffee were interdicted. For constipation, one pill of aloin, belladonna, strychnine, and ipecac was given each night; for the anemia, iron arsenate, 1-67 grain, two granules four times daily. Finally, to establish freedom of circulation in the pelvic viscera, which undoubtedly had borne the brunt of the clogged rectum for so many months, the "uterine tonic" pill (Buckley's), was given four times daily for about three weeks.

The report concerning the next men-

Adult mosquitoes may be carried on railways and water craft, stage coaches and other means of travel.—Dupree.



# To the Medical Profession and the Retail Drug Trade

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There is so much nonsense in the medical press on the subject of yellow fever, and so much of utter "arsenical" absurdity in that to which the laity is subjected and from which they draw their scare ideas, that we can not longer refrain from presenting to the profession some things we know and some deductions therefrom.

The following paragraphs have been put together in a hurry, not as a literary production, but for humanity's sake, and they are chock full of meaty ideas—things that count.

The U. S. Army Commissioner says:

*(Journal of Hygiene, Vol. II, No. 2)*

"The spread of yellow fever can be most effectually controlled by measures directed to the destruction of mosquitoes and the protection of the sick from the bites of these insects."

This is unquestionably true, and in the following pages we show how this may be done and have added numerous success points in treatment, all of which it will profit you to read. If the plan works well, and it surely will, scatter the knowledge broadcast, wherever it will save human lives; but don't neglect to use and strenuously urge every precautionary measure recommended by the able, earnest, consecrated men in official charge of the situation.

## HOW TO SECURE IMMUNITY FROM THE MOSQUITO.

### ***How to Secure Immunity from the Mosquito; and Hence from Yellow Fever and Malaria.***

The difficulty experienced in winning popular assent to new theories is largely due to the inability of men to harmonize the new thought with their previous knowledge and views. Possibly this may account in part for the skepticism with which so many receive the statement that malaria and yellow fever are transmitted to man by the mosquito, and that in no other manner can these maladies be acquired by human beings.

The most stubborn resistance to that part that relates to malaria comes from the adherents to the water-contamination explanation. The writer believes that these two views may be reconciled, and herewith presents the case:

Some years ago, a physician stated that he had attended the laborers employed in building the Yazoo railway. So many cases of malaria occurred among them that at one time it looked as if the work would have to be abandoned; but a complete change occurred when the use of the bayou water was forbidden, and that from artesian wells substituted. Thereafter no one contracted malaria except those who, despite the prohibition, persisted in the use of the bayou water. This induced the belief that the bayou water was the medium by which the cause of the disease was transmitted to the men; and this conviction remains firmly fixed in the minds of those who had so apparently conclusive a proof of its correctness.

But it is not always wise to accept such surface indications as demonstrated truth, for there may be other explanations of the phenomena. If the biologic study of the mosquito and of the malarial parasite show that only in the body of that insect is the life cycle completed, and the stage of the parasite's develop-

ment reached in which it can enter the blood of man and give rise to the disease, the water infection theory must be incorrect, or else some part of the biology is yet unknown. Granting the correctness of both series of observations, there seems to be an *impasse*, but only in appearance, for there is a way to reconcile the difficulty.

For this purpose we will adduce another observation: In Alaska, where the mosquitoes make men long for the winter with temperature far below zero, it is found that the voracious insects may be kept at bay by applying to the skin a solution of calcium sulphide, *calx sulphurata*, this provided the preparation be of full U. S. P. strength. Any other is uncertain and, therefore, should not be relied upon. The mosquito will not settle on the skin or bite anyone exhaling the odor of this unpleasant substance.

The water of artesian wells contains, as a rule, much more mineral matter than that from surface wells or springs; and among the mineral contents the sulphides generally are prominent. Memphis is supplied by such wells, and a number of them give water from which a strong sulphurous odor is exhaled. May not the immunity of the artesian-water drinker have been due to the fact that the mosquito would not attack him by reason of his body exhalations?

In the experiments made in Cuba with yellow-fever infected mosquitoes, it was noted that sometimes the insects would not bite certain persons. Why? No attempt was made, so far as I know, to answer this all-important question.

*Calx sulphurata*, commonly denominated calcium sulphide, has been employed as a remedy for various infectious maladies during the last few years.

## HENCE FROM YELLOW FEVER AND MALARIA.

by many practitioners. Given in doses of five grains a day and upwards, saturation is produced in a few hours, as denoted by the exhalation of the characteristic odor upon the breath or from the skin. This saturation may be sustained for weeks, the medication being absolutely harmless to the patient, even when administered to adults in doses up to 50 grains *per diem*. If the doses are too large, nausea is caused. As a rule, it is best to give small doses, such as gr. 1-6 to 1-2, and repeat them every half-hour, as by this means nausea is avoided and saturation secured with the smallest possible quantity of the drug.

When the body is thus saturated with the sulphide, in most instances, no insect can be induced to bite it—mosquito, flea, fly, bedbug, redbug, ant, chigger, midge, black-fly or any other insect-pest with which the human race is tormented. The writer has kept patients saturated thus for weeks, in treating gonorrhea, tuberculosis, diphtheria, etc., and has never known any harm to result. Many enthusiastic advocates of the sulphides claim that no known microorganism can exist alive, in the body of a person thus saturated, therefore why may we not have in this both a preventive and a cure?

The sulphide should not only be taken internally, as above outlined, but should also be applied to exposed parts of the skin; for which purpose the following formula may be advantageously employed—Calx sulphurata, U. S. P., gr. 18; glycerin 1 oz.; water 2 oz.; mix. This should be applied freely to all ex-

posed parts of the skin before leaving the sheltered parts of the house, especially after sundown, and the application should be repeated every one to three hours as required.

Our brethren who are now struggling with yellow fever in New Orleans must necessarily expose themselves at night to the dangers of mosquito infection. It is easy to put the above described theory to a test, easy, safe and inexpensive; and if it proves efficient, as we believe it will, some valuable lives may be saved, and the means of circumscribing the outbreak vastly increased.

One caution is essential—the sulphide (calx sulphurata) must be of good quality—full U. S. P. strength, carrying at least 60 per cent of the monosulphide. This drug is difficult to manage, decomposing spontaneously, and unless fully up to the pharmacopœial standard should not be depended upon.

The ordinary drug on the market, both in powder and tablet form, ranges in strength from a mere smell all the way up, the U. S. P. shelf being very lone-some.

Best results may be obtained, both for internal use and for the solution, from the 1-6 or 1-2-grain granules of The Abbott Alkaloidal Co., whose product is easily demonstrable to be even above the requirements of the U. S. P.

We have taken great pains with this preparation; none is more valuable and none is more uncertain, hence the variety of opinion expressed regarding it, all depending on the source of supply (quality) and the method of use.

*Later on in this folder we give a valuable study on this subject. One to which much thought has been given, and that cannot be gainsaid.*

## The Treatment of Yellow Fever.

The discussion of the prevention of a malady naturally leads to the point of vital interest—the treatment. We have outlined some important points

in prevention. We are watching with interest untold, to see victory settle upon the banners of our brothers of the South and if any help or inspira-

## HOW TO SECURE IMMUNITY FROM THE MOSQUITO.

tion is drawn from these pages, we shall be satisfied.

Modern science is again on trial, and it is soon to be shown whether the brilliant record made at Havana can be duplicated in the charming capital of King Rex.

The problem of exterminating the mosquito is proving more difficult than at first apprehended. It has recently been announced that the insect finds a breeding place in the moist dirt at the base of leaf stalks, to which it is obviously impossible to apply kerosene. But if we can not exterminate the last of the insects, there is no reason why we should not destroy all we can reach, for there is assuredly less danger from a few than from millions. Let the swamps be oiled, then, and the tanks kept covered, and the open drains shut in, and each householder instructed as to the danger from standing water to which the insects may obtain access. The sick must be carefully protected from mosquitoes by screens that there may be no infection of insects to carry the disease further. Window and door screens should be added to the bed-canopies in universal use, and fumigation by burning insect powder and niter employed to destroy or drive out any that have obtained access to the rooms.

One of the most important questions to be settled is whether as claimed the mosquito will not attack any person who is saturated with calcium sulphide and exhaling the fumes of sulphureted hydrogen. If so, this offers a sure preventive to the physician who must go abroad during the night.

The value of pilocarpine, and of intestinal antiseptics following the complete clearing of the bowels now recognized as the essential first step in the treatment of all febrile maladies, should now be fully tested.

The Clinic Publishing Company has published a remarkable little book on

yellow fever, by the late Dr. W. L. Coleman, which should be in the hands of every man who may possibly have to face this disease. His theories as to the causation of yellow fever are singular and interesting; his treatment is too important to be disregarded. The price of the book is 50 cents.

### ABSTRACT OF COLEMAN'S TREATMENT.

He began by clearing the bowels perfectly, by castor oil or a hot enema; kept the patient absolutely quiet and horizontal for eight or nine days; kept the head cool and feet warm; sponged with diluted whisky if the skin was hot and dry; for head or backache applied turpented flannel to the spine and over it passed a hot iron; for intolerable nausea wet cups to the spine; cracked ice freely with such diluents as watermelon, or flaxseed tea; strychnine and digitalin, gr. 1-134, each hour to maintain nervo-vital energy and the heart.

He treated 100 cases at Memphis, giving 50 sodium hypochlorite and the other 50 sodium sulphocarbolate; 12 dying.

As a prophylactic he advised strychnine arsenate gr. 1-134, and quinine arsenate or hydroferrocyanide gr. 1-3, every hour or two till six doses had been taken each day; at the same time two granules of calcium sulphide gr. 1-6 each, five or six times a day; no purgatives; at bedtime two granules of the dosimetric triad (strychnine arsenate and aconitine, gr. 1-134 each, digitalin gr. 1-67); an occasional dose of saline laxative (Abbott's) before breakfast, followed by sucking the juice of half a lemon; keeping this up for ten days after entering an infected district, then advised two granules of strychnine hypophosphite, gr. 1-134 each, and five drops of nuclein solution, four times a day for the balance of the infection period.

He strongly objected to nerve and vascular sedatives and antiphlogistics,

## THE TREATMENT OF YELLOW FEVER.

looking on the malady as asthenic from the beginning. In addition, Dr. Coleman employed the variants that were demanded by the exigencies of each case, which were so varied that he said he was unable to specify the remedies that might be required.

This treatment was used by the doctor with great success for many years and with many other good things, far in advance of the accepted knowledge of his day, was left as a legacy to his followers—for them to profit.

### CASTRO'S TREATMENT.

Another noted observer was Castro, and he, following the suggestions of the immortal Burgraeve, has a word of helpfulness.

Castro went to Brazil to study yellow fever and its treatment at short range. He was so successful that his methods were adopted by the Brazilian profession generally, and we are informed that they constitute the prevalent treatment at the present time. The following extract from his book on practice describes his method:

"Yellow fever is a disease which is evidently infectious, and a parasitic agent has been sought as its cause. Some investigators profess to have found the microbe which answers such a requirement in rice. The analogies of this disease with bilious remittent fever lead one to suppose that the dominant of the treatment is found in the salicylate of quinine, on account of the antiparasitic and anti-periodic properties of that salt. During the entire duration of the disease, therefore, until the period of declension, two granules of it should be given every half-hour.

"Its intense rachialgia calls for two granules of the hydrobromate of cicutine every half-hour. The fever must be treated with one granule of aconitine and one of veratrine every half-hour until it has been sufficiently reduced. Should nausea and vomiting interfere with the

regularity of the defervescent treatment, two granules of codeine should be added every half-hour, or one of hyoscyamine every hour. One granule of strychnine may also be given every hour to increase the tolerance of the remedies and to prevent adynamia.

"If the adynamia is severe, we must give one granule of phosphoric acid every two hours (gr. 1-6 each).

"For the hemorrhages, which announce themselves by the black vomit, we should use two granules of ergotin or two of salicylate of iron every half-hour. Should melena occur, the same treatment is indicated; but the prognosis becomes very grave.

"Insomnia and delirium call for the use of two granules of the bromide of camphor every quarter of an hour. Should there be suppression of urine from renal fault, two granules of scillitin may be given every hour; if the anuria results from paralysis of the bladder, the catheter must be used and strychnine resorted to. To diminish thirst and excite hepatico-intestinal action, Seidlitz (saline laxative) dissolved in a large quantity of water may be used for an ordinary drink. During convalescence, two to four granules of quassin, and a like quantity of arsenate of quinine, may be given three times a day.

### RESUME.

As Dominant:—	
Infectious element,	salicylate of quinine.
As Variant:—	
Cephalalgia,	citrate of caffeine.
Rachialgia,	hydrobromate of cicutine.
Fever,	aconitine, veratrine, quinine hydroferrocyanide.
Nausea and Vomiting.	strychnine sulphate, hyoscyamine.
Hemorrhage,	ergotin, iron salicylate.
Insomnia,	camphor monobromide.
Delirium,	scillitin.
Anuria,	strychnine arsenate.
Adynamia,	phosphoric acid.

This was before the discovery of the distributing cause, but with what has gone before, may be taken as a good



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outline of the possibilities in positive medication when exact, dependable remedies are used.

Thus, in the writer's opinion, due recognition being given to the cause and its preventability by the use of true *calx sulphurata* as outlined, can yellow fever be more successfully treated than in any other way.

Pardon discoverable irregularities. These pages have been hastily prepared. We want to help.

The old treatment of yellow fever has little success to recommend it; and the trial of new ideas and remedies is legitimate where there is so much room for improvement. It is up to the active-principle therapist to show if any improvement can be secured by the use of these better remedies, and the methods made possible by their employment. Don't look for miracles—just use common sense and apply your remedies intelligently, and report every obvious benefit resultant for the advantage of your brethren.

The writer does not believe that the focus of the malady is to be found in the stomach, prominent as are the symptoms referable to this organ. The main battle is fought out in the kidneys; and on their continued function depends the life of the patient. Suppression of urine or suppressed elimination of feces perhaps, kills him. Empty the bowels, and see if by small enemas of saturated salt solution such a degree of exosmosis may

be induced as will drain the fatal toxins from the blood.

Dr. Waugh's life was saved by a long draught of champagne, by which the renal function was restored after forty-eight hours' suppression—but the remedy failed with six other patients, who were in the habit of taking alcoholic beverages daily, though not to excess; the doctor having been almost a total abstainer previous to the attack.

Give no food nor drink by the stomach—absorption and digestion are inhibited, and only harmful irritation can result. Baths and enemas relieve the thirst, and any patient can go without food for the brief period of this fever, where the man will be well or buried in a week. Small enemas of predigested foods may be employed in some cases, but feeding is not essential. Finally, don't be too anxious about yourself. Most men set far more store on their lives than is warranted by their importance.

### TREATMENT RESUME.

Stop all food till reaction is fully established. If your patient doesn't die from the disease he won't die of starvation.

Eliminate, with salines, by the bowel and disinfect with the sulphocarbolates, so as to remove all possible labor from the kidneys.

Saturate with calcium sulphide (*calx sulphurata* U. S. P.), and sustain saturation.

Support with nuclein and the triple arsenates of iron, quinine and strychnine.

Allow plenty of pure, cold water, best by enema.

Resume food very carefully and gradually as fever subsides and kidneys begin to act.

### COLEMAN'S INIMITABLE BOOK

## ORIGIN, CAUSE AND TREATMENT OF YELLOW FEVER

With its Differentiation from Dengue, with which it is often confounded

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## Calcium Sulphide: *Calx Sulphurata*.

*This article on calcium sulphide, showing its variability under ordinary conditions and the wide range of therapeutic possibility of a good article, was given to the profession last year and is here reproduced from Merck's Archives in verification of what has gone before. It calls for careful study.*

When "Ringer's Therapeutics" first appeared, the medical profession was startled to find very small doses recommended, which caused the epithet of "homeopathist" to be hurled against the author. At that time even the slight innovation of dividing the ordinary daily dose into ten or twenty portions instead of three, was sufficient to arouse doubt as to an author's orthodoxy. One of the most suspicious articles he recommended was calcium sulphide, in doses of grain 1-10 every hour. In the form of potassium sulphuret (potassa sulphurata), the dispensaries contained long articles advocating the use of sulphurous acid, but not a word on calcium sulphide. Little impression, however, was made upon the practice of the profession; the drug was neglected, and consigned to the bone-yard of discarded remedies, retaining a place in attenuated form with the homeopathists under the name of "hepar sulph."—a sort of, an "*in memoriam*" as it were, but one which has been of real value, as you shall see.

Ringer's reintroduction of the drug was followed by some desultory trials, but its use gradually died out, with the single exception of its employment as an abortive of boils, for which some insisted strongly that it was good, while others, equally as able observers, strenuously avowed it to be good for nothing. It has since been closely demonstrated that their failure was due to the difficulty of obtaining the salt in a fit condition for administration, and to the very small doses given; to not taking into consideration the fact that this preparation is variable (always weaker rather

than stronger), and that variable preparations of this class, more than all others of which it is likewise true, *must be pushed* (increased as to amount given each time as well as to frequency of administration), until effect—to dose enough!

The sulphide of the shop consists of a mixture, in varying proportions, of calcium trisulphide, calcium pentasulphide, calcium sulphate, and the true calcium monosulphide, the latter constantly decreasing in relative proportion as it decomposes in the presence of the bottle-contained air. So that, as in many other instances and from the same or a similar cause, the modicum used on the doctor's prescription is practically inert. The same is also true of compressed tablets and particularly so of tablet triturates. According to Shaller, it is an unusually good specimen that contains 30 per cent of the sulphide, from that to nothing, usually practically nothing, being the points between which different preparations vary.

During the preparation of this study I have bought in the open market and had carefully tested many samples of calcium sulphide with results as follows: The highest test from bottles of the powder in drug stores was 9 per cent; gelatin-coated pills from various standard manufacturers, highest 13 per cent; tablets, compressed, 60 per cent; tablet triturates, 30 per cent; other tablets tested, 36 to 40 per cent; Abbott's alkaloidal granules, 65 per cent; U. S. P. test, 60 per cent.

Calcium sulphide begins to decompose the moment it leaves the utensils of man-

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ufacture, the rapidity depending upon the amount of non-saturated air with which it comes in contact.

The oxygen in a well-filled, tightly-corked bottle of good calcium sulphide, or of tablets, is sufficient to render the top layer inert, and occasional opening to use will do the rest. Only when the strictly fresh sulphide is rightly made into a properly-protected but readily-disintegrating pill or granule can the full strength of this valuable agent be retained, and without this it is worthless. Hence, the varying opinions as to the therapeutic value of this preparation. So difficult is this pharmacal problem that some honest manufacturers have stricken this article from their lists, while from most of the remaining pill and tablet preparations on the shelves in the shops scarcely a trace of the distinctive odor is to be detected when the granules are broken open. A bottle containing calcium sulphide granules or tablets that are right, emits no (or but slight) odor on opening, but a taste of the crushed goods at once reveals what they are. The stronger the characteristic taste, the better and more reliable the preparation. The odor is not an indication of activity, some tablets smelling strongly showing on analysis a low percentage of sulphide. Probably the odor is due principally to free sulphureted hydrogen ( $H_2S$ ).

Calcium sulphide is a grayish white, amorphous powder, with a disagreeable but characteristic odor. In reaction it is alkaline. Exposed to the light it possesses the property of remaining luminous in the dark, which has given it the name of "Canton phosphorus." This quality has been utilized in the manufacture of match boxes, which are covered with a paint containing the substance. Boiling water decomposes calcium sulphide into calcium hydrate and sulphhydrate. In cold water the carbonic acid sets free the sulphureted hydrogen,

leaving calcium carbonate. The weakest mineral acids likewise decompose it.

If taken into the stomach during the period of acid digestion, the sulphide is decomposed to a greater or less extent, setting free the sulphureted hydrogen, part of which may be ejected in eructations in which the gas is easily recognized; of the residue, the resultant sulphurous acid is absorbed as well as the undecomposed portion. Both are good, for both are active, but the undecomposed product is more desirable. Absorbed, it is broken up by the body, the surplus appearing as hydrosulphuric acid ( $H_2S$ ) eliminated by the lungs and skin, while the urine contains an excess of sulphates. It will thus be seen that the best results are obtained from the exhibition of calcium sulphide when the stomach-content is alkaline or after it has been made alkaline, in which case its activity practically all passes in the blood and other circulating fluids to permeate, disinfect, and clean up the work-shop of every living cell—a veritable systemic antiseptic, a regular house-cleaner of the most desirable character.

In 1824 Woehler demonstrated that the sulphides are oxygenated in the body, but if the dose ingested is very large, part passes into the urine in the form of sulphide, which blackens the salts of lead. After toxic doses of metallic sulphides, Woehler and Orfila showed the presence in the urine of part of the salt as unmodified sulphide, beside a quantity of sulphates. Considerable quantities of the gas may be disengaged in the stomach without causing any deleterious action on the red blood cells but if taken in through the lungs, sulphureted hydrogen unites with the hemoglobin, reducing it to methemoglobin and this union, once formed, is exceedingly difficult to break.

Respired in quantity it has caused death from rapidly induced asphyxia; this has led to timidity in the use of the

## CALCIUM SULPHIDE: CALX SULPHURATA.

sulphides, preventing the demonstration of their therapeutic possibilities. But in gonorrhea, calcium sulphide of the best quality has been given with impunity in doses ascending to 50 grains in twenty-four hours and with marvelous curative effect, while children with diphtheria have taken two grains every two hours for days with benefit and no harm. It has been injected intravenously with impunity. Here the acid reaches the lungs after passing the right heart, and is eliminated into the atmosphere with the carbonic acid, the left heart receiving very little. But this, carried through the circulation, slightly stimulates the sweat glands (Rabuteau).

During its elimination by these various routes, the sulphide of calcium exerts an action on the respiratory mucosa, whose secretion is stimulated and expectoration loosened; on the sweat glands, whose excretion is likewise augmented; on the kidneys, producing diuresis by the sulphureted hydrogen and the sulphates; and in general an increased activity of the circulation, possibly some fever, and an increase of the appetite (Rabuteau).

Shaller says that the toxins produced by the bacteria of various zymotic diseases are neutralized by the presence of sulphureted hydrogen in the blood or the white blood corpuscles are stimulated to unusual vigor, and their phagocytic powers greatly increased. But it has seemed to the writer that the phenomena following saturation by the sulphides are better explained by the hypothesis that this renders the continued life and activity of these organisms in the saturated body impossible—either killing or inhibiting them. Whether this action is exerted on some microorganisms only, or upon all forms, is uncertain. The cessation of suppuration coinciding with saturation indicates that all ordinary pyogenic bacteria are probably destroyed by the sulphides. In any event its control action over scarlatina, measles, smallpox,

whooping-cough, etc., is beyond question.

The remarkable power exerted over diphtheria by calcium sulphide is a discovery which the world owes to Fontaine, of Bar-sur-Seine, whose first paper appeared in 1875. Increasing the bronchial and cutaneous excretions, it aids in eliminating the toxin. But the principal effect for which it is given is that of a parasiticide, as which it has no equal when applied locally. Fontaine preferred the lime salt to that of potassium or sodium, because the former also supplied an element needed for repairing the damage inflicted by the disease.

The earlier reports were favorable, but in desperate or malignant cases the remedy failed, as it was still given timidly in insufficient doses. But this fear was subsiding, and we find Ringer prescribing calcium sulphide in doses from 1-6 grain up to forty times this quantity, many times a day, in anthrax, furunculosis, scrofulous ulcers, and for purulent, ichorous, and sanious wounds. Fock also found it useful in acute mammary abscesses.

Chaussier had employed potassium sulphide for croup and diphtheria as early as 1808, and Ribes in 1818; but they had dropped it on account of the difficulty in administering it in potions to children; and it was not till modern pharmacy had evolved the granule that the remedy was made available.

While in diphtheria calcium sulphide is given as the dominant or leading remedy, the variants or adjuvants are by no means unimportant. Fever demands aconitine, digitalin; periodicity calls for quinine arsenate or hydroferrocyanide; emetics may promote the loosening of false membranes; strychnine restores the normal tone (Van Renterghem), and antitoxin should not be forgotten.

Fontaine also urged the sulphide for whooping-cough, in which he has been followed by many. Droixhe at first gave

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the sulphide only in the second period, but later he gave it from the first, and esteemed it equal in efficacy in this malady as in diphtheria. Shaller has given it continuously for three or four weeks, always with marked reduction in the number and frequency of the paroxysms, without anemia resulting.

Coleman has obtained equal success, and claims that even in the incubation period whooping-cough may be aborted by saturation with calcium sulphide and the conjoint use of atropine to full effect. Since it is now admitted that this disease is due to microorganisms, and that during this period they are actively at work, it seems perfectly reasonable to suppose that they may be effectively combated then, when their numbers are small. Coleman has taken children who were not immune, saturated them with these remedies, and exposed them to this most infectious of all ailments; they not only did not contract it then, but when exposed during subsequent epidemics proved to be immune, and with all of this from our experience we most heartily concur.

The results obtained in these two affections encouraged trial of the sulphide in other infections. Castro tried it in smallpox. His rules are: (1) Begin treatment as soon as the malady is suspected. (2) Saturate the organism with the parasiticide. (3) Keep up the saturation until certain of the effect. (4) Even if the eruption has appeared it may be made to retrograde so that vesiculation does not occur. (5) Pustulation under way, the sulphide may still prevent complications, destroy the odor, abate considerably the fever, and attenuate the gravity of the attack in hastening desiccation. (6) The disagreeable odor of the sulphide and the necessity of giving it in numerous small doses renders the use of granules advisable, which must be known to be active if a correct judgment as to its value is to be

made. The intensity of the administration should be commensurate with the effects required by the nature of the case.

Castro also applied this remedy in this manner in treating roseola and erysipelas.

Van Renterghem employed the sulphide in four cases of scarlet fever, two anginous, saving all, and that in a very short time and with a brief convalescence.

Shaller says that measles, whooping-cough, scarlet fever, smallpox, diphtheria, and erysipelas are all more easily controlled and freer from sequelæ when this remedy is used. He gives it throughout the course; adding aconitine for fever, caffeine for threatened collapse or heart failure, strychnine for paralysis. If the throat is inflamed he gives the sulphide in solution, in severe cases every fifteen minutes, so that the solution almost constantly bathes the infected surface.

Many physicians employed calcium sulphide in smallpox during the last epidemic in the West, and generally with good results. Given early to saturation, most cases seem to be abortive, and the secondary suppuration and its fever are wanting. It is also a markedly reliable preventive or modifier in exposed cases, but must be given early and in large doses.

In respiratory affections Van Renterghem recommended calcium sulphide as an expectorant, in the dry coughs of commencing catarrhs; in phthisis; to increase secretion and facilitate expectoration. Shaller praises it for tough, scanty sputa, in measles and pertussis with distressing cough, in chronic lung diseases where the sputum is putrid. Aulde advised this remedy to abort a commencing coryza. It has been suggested that if other microorganisms can not live in the human body when saturated with it, why should the tubercle



## CALCIUM SULPHIDE: CALX SULPHURATA.

bacillus? The question has not been settled, but is well worth consideration.

In acute gonorrhea there is no remedy, not even copaiba, which will so surely and so promptly stop the discharge; and unlike the time-honored but useless balsam and to the great relief of the patient, the discharge does not return the moment the remedy is discontinued. The doses must be large, but a permanent cure may be usually achieved. One physician reports unvarying success from doses up to 50 grains each twenty-four hours. It is the most reliable remedy in chronic gonorrhea. The writer has never known any remedy to be of benefit in gonorrheal "rheumatism," except the sulphides of calcium and arsenic, and these have not as yet failed to cure practically every case of this malady brought to his notice.

In various skin diseases calcium sulphide has been used locally, forming an ingredient of the famous solution of Vlemminckx. In Alaska it has been found that the voracious mosquitoes will not attack a man whose skin is covered with a solution of this remedy.

Van Renterghem advises that calcium sulphide be given, even to infants of the most tender age, in granules containing 1-6 grain every quarter-hour in acute cases; to adults two or more granules; until saturation is denoted by the odor of the drug appearing on the breath *or the skin*. The eructation of sulphureted hydrogen is less certain, as the acid gastric juice will decompose the salt and disengage the gas even when a single dose has been given. If the drug is pushed too rapidly it may cause nausea, and this has been taken to indicate saturation, but is rather an indication for smaller doses. After saturation has been secured the doses need not be given so frequently but just enough to keep up this effect as long as it is deemed requisite. In infectious diseases it is well to sustain saturation for one week; in tu-

berculosis for two or more weeks; in general, till the danger has ceased.

How much is required to produce saturation? It varies. Fontaine gave 20 granules (containing 1-6 grain each), to a child a year old, 30 to one of twenty-two months, 60 to adults, within twenty-four hours. Castro gave 60 to 90 granules to adults in the same time. As a prophylactic five granules may be given daily to infants, ten to adults. Fontaine says that when calcium sulphide was administered to all the children as a prophylactic, during an epidemic of diphtheria, he was frequently called to see adults ill with that malady when the children in the house, taking the sulphide, were immune. The epidemic really ceased only when the use of this prophylactic had become general.

Externally, solutions of 1 part to 10 of water may be applied; the skin to be washed soon to avoid undue irritation.

The solutions for use must be freshly prepared each day as they quickly decompose. Glass spoons should be used for dispensing, as silver is blackened by it. Shaller says that persons who swallow the granules do not tire of the medicine as soon as those who take it in solution; that is also our experience. If the eructations are disagreeable the remedy should not be taken just after meals.

In some cases where there is intense acidity, calcium sulphide will not be tolerated by the patient, as each dose will cause nausea or even vomiting. This annoying condition can be promptly controlled by exhibiting 2 grains of vegetable charcoal ten or fifteen minutes before the calcium sulphide. The writer has found that results are more speedy and pronounced when these remedies are given together in this manner.

Experience has amply proven that the small dose at frequent intervals is the most effective. The ordinary compressed tablets, containing 1-2 and 1 grain, and coated or uncoated, are practically use-

## HOW TO SECURE IMMUNITY FROM THE MOSQUITO.

less; they pass from the stomach into the intestine, where no chemical change takes place. To bring a patient promptly under the effect of this drug two or four granules, 1-6 grain, should be given hourly or half-hourly, and one granule (1-6 grain) will usually prove quite as efficient. The secret of success is to saturate the system quickly and then to maintain this condition with smaller

doses given at longer intervals. The calcium sulphide patient usually calls for eliminatives and the tonic arsenates.

It will, therefore, be seen that to have a good preparation is most essential, and that even this may be given wrongly. A good preparation, chemically broken up in the stomach and given to "dose enough," will produce results most desirable and satisfactory.

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## R E S U M E

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*Out of a long series of experiments with a large number of samples, the highest test from stock bottles of calcium sulphide powder from drug stores was 9 per cent; gelatin-coated pills from various standard manufacturers, highest 13 per cent; tablet triturates, 30 per cent; other tablets, compressed, and therefore for the most part therapeutically inert, by reason of density, 36 to 40 per cent; Abbott's alkaloidal granules, 1-6 and 1-2 grain, 65 per cent; U. S. P. test, 60 per cent.*

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*Good goods are cheap enough, and nothing is too good for the Doctor. It don't pay to fool with that upon which you are not sure you can always depend.*

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## SUCCESS MAXIMS FOR THE TREATMENT OF THE SICK.

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**Equalize Circulation  
Eliminate Waste  
Stop Autotoxemia**

**Maintain Systemic Asepsis  
Stimulate Innervation  
Feed the Tissues**

**Thus Restoring Normal Equilibrium.**

strual period was, in effect, that though two weeks late, there had been less pain than at any menstruation she had experienced. The bowels having been thoroughly evacuated daily, the laxative pill was then replaced with Waugh's anti-constipation granules, with directions to take four, six or more granules at night, for four nights, and then to drop one granule each night until the needed dose was determined.

The headaches became less troublesome but did not disappear entirely; they were made worse by reading or other close work. After correction of refraction and wearing glasses a few weeks, the headache disappeared entirely. A temporary backset occurred by reason of an attack of "bronchial trouble," for which she was treated in another city, and which kept the patient indoors for several weeks. At a recent visit to my office, she reported that she had no occasion to take any of the "white pills," (B. U. T.), and though the periods were sometimes a week or ten days late, there was absolutely no pain.

W. C. BUCKLEY.

Philadelphia, Pa.

—:o:—

If Dr. Buckley had added no more to the armamentarium of the physician than a knowledge of this formula, a combination of aletrin, bryonin, caulophyllin, helonin, hyoscyamine and macrotin in pill form known as Buckley's uterine tonic, he would be deserving a great credit and lasting memory.

This combination is useful, in fact almost specific in all congested pathological conditions of the pelvic viscera. It is of daily service and can be relied

upon as a valiant "comforter;" and has approved its value in many a case.

But Dr. Buckley has done more; he is an earnest seeker for truth, an ardent believer in "the smallest possible quantity of the best obtainable means to produce a desired therapeutic result," and has given the all of his earnest life-study to the betterment of the profession which he loves and which, to the very uttermost of his ability he serves.—ED.

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#### A DOCTOR'S OWN CASE.

More than a year ago, after exposure to inclement weather, and as a result of overwork and shock during a severe attack of *la grippe*, neuritis rendered my left arm almost helpless for a time and then followed a severe illness which kept me in bed for eleven weeks and from which I am far from recovered now. My health had long been poor. I came to Florida after a breakdown following my internship in the Mary Thompson Hospital, Chicago, and as gynecologist in an eastern sanitarium. Dr. Ingals had detected consolidation in both apices. In addition to severe professional duties after my coming to this state, I had the care of an invalid father and mother and sister.

In June, 1904, I wrote to the CLINIC and doubtless owe my life to the advice which was sent me. A drive to a neighbor's, some miles away, was followed by fourteen hours of stupor. On returning home progressive paralysis gradually supervened. Then I wrote to the CLINIC. When the answer came I was helpless. My skin was as white, as smooth and almost as hard and cold as marble. My eyes were black as coal and bright as

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Some species may be dispersed to a limited extent by wind; others migrate at times long distances, enormous numbers.—Dupree.

Dormant mosquito eggs are carried by water courses, source to mouth, viable, in back waters, recesses in banks, overflows.—Dupree.

stars; sight much impaired; hearing uncanny in its acuteness; swallowing difficult; obstinate constipation; bladder involved. Respiration seven per minute; pulse weak and easily compressed and variable. Mind exalted, brain unusually active; I seemed to myself separate from my body and only when my position was changed would there be pain. Fly blisters would not blister nor counterirritants irritate my skin. I had been over-excited the day before and a congestive headache had been followed by a large extravasation of blood discoloring the occiput and cervical region. Antiphlogistine was applied over the spine and this and the lecithin doubtless saved me.

This was in June. By October I was able to be about the house with crutches, wearing stiff corsets and stiff high shoes. In November I attended three obstetrical cases and partially left off the crutches. In December overexcitement with congestive headache was followed by what seemed to be left-sided hemiplegia, lasting only a short time, but leaving the left side weak. In January I doubtless should have had pneumonia except for the dosimetric trinity and my husband's blistering my side with flannel dipped in boiling vinegar. In a week's time I was as well as before except that for six weeks I could not sit up before my breakfast was fully digested without turning ashy-gray and going into a spasm. Thumbs drew in, then the arm, and if cicutine was not at hand to stop it there was clonic spasm of all the muscles to opisthotonos. In March I was better and attended three obstetrical cases.

Now, if I keep out of my buggy altogether and my spine is rubbed every day with glacial acetic acid, sometimes

full strength, or diluted according to pain or soreness, and painted with iodine three times a week, keep the cicutine, the dosimetric trinity, the cactin and the bromide solution constantly within reach, and take cod-liver oil and calcium lactophosphate regularly, using the sulphocarbolates, the podophyllin and leptandrin as needed, I can be about the house and attend to the chickens and turkeys and the office practice that comes. Even with care, and with air cushions and pillows, a ride is followed in a few hours by great pain and severe prostration, nervousness and depression.

Would a steel jacket help me? My neck is as bad as the spot in my lumbar spine from an old hurt when I was thrown from a horse years ago. Can I ever hope to answer calls, to drive, to go among people where I am liable to meet confusion and excitement? So far my practice has clung to me, but I can not hope that this will last if I can not answer calls. Yet strict professional work rests and does me good, while society and polite small talk almost drives me wild.

I have been using the alkaloids for about three years and am more than pleased with them. They were certainly a large factor in saving my life last June and have quickly relieved many distressing symptoms since then.

O. E. S.

—, Florida.

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This letter should have appeared in the CLINIC two or three months ago, but has been crowded out on account of the large amount of other material. We feel sure that the "family" will feel more than a mere professional interest

Mosquitoes are found living 13,000 feet up the Himalayas, and at the sea level of Scandinavia.—Dupree, *N. O. M. & S. Journal*.

Pools of any size lasting eighty hours may subserve the developmental needs of a *Psorophora* mosquito.—Dupree.

in this case, since the lady is one of our own fraternity.

The treatment that has been followed seems to have been a very satisfactory one and you may be sure that the CLINIC "staff" feels happy that it has contributed something to the saving of this valuable life. If we can do more we shall be glad to do it. Now, that the crisis seems to be past, the indications are for absorbents, remedies to stimulate metabolism, increase tissue nutrition and sweep out the by-products which are still present. For this purpose, try arsenic iodide, one granule and mercury biniodide, phyto-laccin and iodoform, three granules each, three times a day to meet the indications. This is a most powerful alterative and tissue energizer. As a nerve tonic, zinc phosphide may be taken three times a day, either in connection with lecithin or alternating with it; two weeks with one and then two weeks with the other. Intestinal antiseptics is absolutely essential. Keep the bowels thoroughly cleaned out with occasional doses of mercury and podophyllin and morning doses of saline, using sulphocarbolates as needed to keep the passages inodorous and harmless.

You might try penciling the spine with a stick of silver nitrate instead of tincture of iodine, as the former has a more decided penetrative action.

Probably it is hardly necessary to give advice concerning personal hygiene. It is plain enough that severe exercise is to be avoided. As a substitute, massage would be a good thing. We understand, of course, the impossibility of securing the services of a trained masseuse, but could you not, Doctor, find some competent woman to whom you could give a little instruction? Com-

mence with mild strokings and then gradually increase to more vigorous movements until you can bear moderate kneading of the muscles up and down either side of the spine, abdomen, etc. This will wonderfully stimulate nutrition and help to carry away tissue waste.

The diet, of course, should be as nutritious as possible and in quantity as considerable as you can digest well. The cod-liver oil and lactophosphate are certainly good and we cannot add anything to the advice concerning the dosimetric trinity, cicutine and cactin, etc. As far as I can judge, I would not think that the steel jacket is indicated, but of course, at this distance, it is a little difficult to give a positive opinion.—Ed.



#### CONDURANGIN—SOME CORRESPONDENCE.

From time to time there have appeared in the CLINIC suggestions and reports concerning the value of condurangin in cancer. In this connection, we print some correspondence recently received, without further comment:

You will remember that some time ago there appeared in the CLINIC an editorial by you and a report by me on the use of condurangin for cancer of stomach. I have lately treated a patient with all the symptoms of this fatal malady. All other remedies were useless, but she *immediately* improved on condurangin, and after three months' use seems cured.

From the same patient I removed the left breast for scirrhus cancer, which has healed after the operation. The profession should know of the drug.

The next letter is from a patient, who has been under the care of one of our good friends in Texas:



The larvæ of an *Aedes* mosquito may sleep the winter through in their icy bed amid the leaves of the pitcher plant.—Dupree.

The larva of a *Stegomyia* mosquito becomes an imago in forty days in pure water or in seven days in concentrated feces.—Dupree.



I presume you remember me, as having called at your office with a letter from Dr. — of this place.

I am now very happy to be able to state that Dr. — congratulated me yesterday for being the first person cured of cancer in the throat. Of course, the compliment was returned to the doctor who performed the cure, and to your kind advice, which may enable this old Dutchman to live many years yet, to thank you a thousand times for your life-saving advice.

I remain yours most gratefully,  
—

A letter like this is read with sensations which may be imagined. Sometimes in the midst of the many discouragements which await the man who tries to introduce so many needed improvements in the practice of medicine, such little rays of light come to encourage him to renewed efforts. The doctor writes:

I am glad to inform you that my friend and patient, Mr. —, is well, for which he seems to be the happiest man in town. I began injecting 1-67-grain of conduragin twice daily in the center of the sore, May 13, and increased to 1-16-grain, followed by 10 minims of nuclein solution, after which I applied 5 per cent methylene blue. I also gave nuclein solution and conduragin internally three times a day. I hope this cure will be permanent.

I was called two years ago to see a man seventy years old who had been suffering from cancer of the stomach for two and a half years. He had almost starved to death, as he could not retain food more than half an hour at any time except meat broths or very thin soup. He also suffered very excruciating pain for hours after vomiting food and nothing but cocaine or morphine seemed to give him any relief. Conduragin relieved the pain entirely and he gained five pounds in weight, but died in a few months.

The exemption from malaria enjoyed by the Louisiana University cadets is due largely to the minnows that destroy mosquito larvæ.

Conduragin is certainly a valuable remedy and deserves a more thorough trial. That it will cure some cases of cancer seems to be evident, but just how many remains to be shown. That it acts locally, as we have claimed is also evident.—Ed.

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#### ICHTHYOL COLLODION IN ERY- SIPELAS.

On page 611 of the June CLINIC you refer to ichthyol as a local application in cases of erysipelas, adding that ichthyol-collodion should be an ideal application. In this relation I wish to record some eighteen cases of erysipelas treated in the last three years with ichthyol-collodion without a single failure.

The method:—Paint the preparation over the diseased area, beginning well out on the healthy tissue; apply frequently, one coat on top of another (without washing) until the layers begin to peel when it may be removed with warm water and soap. The tissues underneath will be found in a healthy condition. The only objection I find to this treatment is its black color when applied to exposed surfaces; but the patient is generally willing to isolate himself if assured that belief will be quicker than by ordinary methods.

A. T. BOTTS.

Warrensburg, Ill.

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#### THE ALKALOIDS SAVED THIS LIFE.

Some ten days ago I was compelled to go through an ordeal, the successful termination of which I am sure is due to you. I was called to the country at 2 a. m., April 22, some four miles from

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Let us only paraphrase the saying of Ricord: "A clap begins and God alone knows when or where it will end."—Keyes, *Med. News*.

town, and found a lady in her second confinement. Her first baby was born just twelve months and six days before. She was well nourished, about twenty years of age, short, rather fleshy, blonde; everything normal, except a persistent vomiting with every pain. She had not looked after the bowels as closely as she should and thought that the cause.

About seven o'clock the vomiting was so severe that the pains were stopped. I gave her emetine, one granule every fifteen minutes for two doses, when the vomiting stopped. The labor pains returned and a little after nine a bouncing boy of twelve pounds was born. The woman seemed to be normal though quite a gush of blood came with the child, but the contractions of the uterus were strong and the bleeding was stopped. I took away the placenta slowly and had a fine contraction.

She wanted to eat after some ten minutes, but when given a drink of water complained of being sick. Thinking I had a hemorrhage to deal with I was surprised to find the uterus well contracted, yet she was as white as the sheet and was becoming cyanosed. I had already given a granule of atropine, 1-250 grain. I repeated this dose with two granules of glonoin. Seeing this was not sufficient, I gave her in five minutes two more of the glonoin, but she was unable to swallow. I then dissolved two granules of strychnine arsenate, gr. 1-134, and two of glonoin and used them hypodermically, repeated in about every five to ten minutes with about every thirty minutes a dose of atropine. The second hypodermic I was rewarded by the cyanosis and sweating subsiding and in about one hour and a half, after giving eight hypodermics, she

opened her eyes and spoke, and in three hours from the onset of the trouble she was perfectly normal. For thirty minutes she was in complete collapse and comatose with stertorous breathing, going down until the breath was nearly imperceptible. I used hot water in bottles and wrapped her limbs in hot flannels, but she was so far gone in collapse that it looked impossible to ever bring her back, yet, thanks to the alkaloïds, it was done. I think this was "dose enough," just enough to satisfy anyone, and it won the battle.

G. W. WHITELEY.

Albany, Mo.

—:o:—

In cases of shock or collapse, the treatment you used in this case is just right—excellent. This was a trying case, but you had the weapons to conquer with and knew how to use them.—ED.

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#### BEAN-LEAF TEA IN THE TREATMENT OF POISON OAK ERUPTION.

About fifteen years ago while on a call at a negro house on the Payne plantation, I noticed a peculiar odor coming from an adjoining room and asked what it was. An old negro midwife told me she was treating a bad case of poison oak eruption with the bean leaves. I had come near dying twice in my life from erysipelas following this eruption and had studied up about all there was in reach on the subject. But the tea from bean leaves was a new idea and I went to study it.

She had taken the fresh leaves of the common pole beans in her garden—cooked them in water, strained off the

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Venereal Wrecks: Tabetics,paretics,dead or disfigured children, laparotomies for pus tubes, impotence, sterility, etc.—Keyes.

One in ten New Yorkers, or one in four unmarried males in Berlin, is syphilitic; estimates vague and doubtless inaccurate.—Keyes.

tea, squeezing out most of the liquor from the leaves, and was giving half a teacup dose every third or fourth hour, while the refuse was spread thinly on a cloth and covered over the inflamed surface. This first dressing was not changed but was kept wet with the tea. I questioned the man who told me that the application seemed to stop the itching and he could sleep, while without it he was on a rack of pain. The tea, he said, sweated him and he did not crave cold water so much.

These points sank deep into my mind and the first case I had I put on the same course. It was an eighteen-year-old young man who had both arms covered with the fine little blisters, and fever. He seemed to be almost frantic with the itching because he could not scratch it. I had his mother gather a lot of bean leaves out of a few of which I squeezed some of the juice while she was boiling the remainder. This juice I applied to the sore surface with a cotton mop. In a few minutes, before I had got over the entire surface, he was asleep. We woke him up to put on the thin poultice and he dozed off again. We spread the cooked leaves thinly (one-quarter inch) all over a cloth and placed it around the arms and wound a bandage over it not too tightly. This was kept wet with the tea. Two cases afterward, in following years, were treated in the same way with no more itching, and cure of the inflammation in forty-eight hours. I mention this because often we get caught without our best means of cure and a "cornstalky" plan often does good work.

BEN. H. BRODNAX.

Brodnax, La.

Many of you believe in your hearts that old, old fable about the adult male needing intercourse for his health.—Keyes.

Have any other readers of the CLINIC had experience with this remedy? Please report.—Ed.

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#### SHALL THE PHYSICIAN DISPENSE?

Last month we gave considerable attention to this question in its various phases, one of the most important we believe, that confronts the American physician. As a further contribution to the subject we reprint below an article read by Dr. J. A. Clark, of Chicago, before the Douglas Park branch of the Chicago Medical Society, published in the *Chicago Medical Recorder*:

#### SHALL THE PHYSICIAN DISPENSE?

This question can not be answered off-hand to apply to all physicians. So much depends on the personal equation of the man, on his surroundings and influences, knowledge of drugs, liking for the work, facilities for handling and making preparations. Almost as well might we ask the question, Shall the doctor wear a certain style of hat or coat, drive a certain colored horse, or use a certain make of automobile? I shall make no attempt to speak in a dictatorial manner as to what is or what is not best for all physicians, taking it for granted that every one in the profession knows his own wants and needs and what is best for himself in his own particular case and in his own surroundings. But I shall give some of the reasons why I believe it is best for the physician to do his own dispensing. Some reasons why I think it is best for me, and why it is more satisfactory to me after trying both ways, that of writing prescriptions and that of doing my own dispensing.

I do not expect every one to agree with me in this matter. The retail druggists, I am very sure, do not share my

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To eradicate warts apply chromic acid solution, 100 grs. to ounce, every other day.

—Medical Summary.

views; neither do all physicians agree that dispensing is the better system.

Is there any subject upon which all doctors do agree?

Any one who has thought of, or investigated the subject at all must know that in the last ten years the plan of dispensing has made immense gains all over this country and that every year the number of physicians who are coming into this way of doing business is growing by leaps and bounds. For this fact there must be some reasons.

As a basis for my remarks, I wish to lay down some fundamental propositions. First, that no person should attempt to enter the ranks of our profession who has not a genuine love for his work and whose entire efforts during all his professional life shall be to this end, that he cure his patients as quickly, as safely and as pleasantly as possible, and in incurable maladies give the most relief from suffering. Or, as stated in the ancient oath of Hippocrates, which was taken by the physicians of old: "I swear by Apollo, the physician, and Aesculapius and Health and All Heal, and by all the gods and goddesses that according to my ability and judgment I will keep this oath and this stipulation. Into whatsoever houses I enter I will go into them for the benefit of the sick, and I will abstain from every voluntary act of mischief and corruption." In the 2,400 years that have elapsed since that was written no code of ethics has ever been framed which is any improvement upon it as a lamp and a guide for our direction. Some principles are eternal because they are right, and nothing ever has or ever can change the fact that the life work of the true physician is to labor for the benefit of the sick, and that practice is best which saves the most lives and cures quickest and safely.

The second main proposition I lay down is, that having done our whole duty to our patients, our patients have a duty to perform toward us, and we must see that they do it. While the world may owe us a living, practically we have

to collect it ourselves from the aforesaid patients. It is our duty to collect it for the benefit of ourselves and our families. Somewhere I have read that he who fails to provide for his own household is worse than a thief.

I take it that we here are all what are known as general practitioners, doing everything that comes in a general family practice, and that we expect to live by giving service to these families year after year. We expect to hold these families and to have our business and our income grow by the good reports our patients give to their friends and so form an endless chain. I am sure that a very potent factor in holding our patients is by doing our own dispensing. First, you will find that the patient likes it better. The first element of success is a satisfied patient. In all my life I have never had a patient ask for a prescription when I had the remedy with me to dispense, but times without number they have told me they had more confidence in the medicine when the doctor gave it himself. There was then no fear of substitution. The druggist, his clerks, or some favored doctor have no chance to discuss the patient's disease, give unasked advice and retail gossip. As most people are sensitive about their ailments, and as remedies often indicate the disease for which they are prescribed, it breaks into the confidential relations existing between physician and patient to have the prescription discussed by outside parties.

By dispensing your own remedies you often save hours of time to your patients and gain the same number of hours in the treatment. This may mean saving a life in acute diseases. But last week one of my patients waited all day to have one of my prescriptions filled because the druggist was out of the remedy ordered and had to send to the wholesale house for it. Now, while I honor and respect this druggist for going to all this trouble to fill my prescription right, had the case been one of great urgency likely my patient had been dead before the medicine was delivered.



Picric acid in olive oil is an excellent remedy in burns. It markedly mitigates the pain.  
—Med. Summary.

Apomorphine hypodermically in full dose is one of the best remedies to cut short an asthmatic attack.—Summary.

Dispensing saves your patients money. You all know that the actual cost of the drugs used in acute diseases only amounts to a few cents a day. The complaints that were most common to hear were about drug bills. The fee of the physician is often a small matter compared with the other bill.

You always know just what your patients are getting. They are obliged to report to you instead of to the drug clerk. They cannot get the medicine repeated month after month, whether suited to their needs or not. You will use better drugs yourself than you are sure of getting at the ordinary drugstore. The drugs you use are as much a part of your armament as your scalpel, your obstetrical forceps or your microscope, and they should be much more carefully selected. You use drugs a hundred times where you use forceps once. The best and purest drugs are none too good for my patients.

You have a better chance to watch the effect of your remedies and you will become a better therapist yourself by doing your own dispensing. Called to a case, you administer the first dose yourself and watch the effect, often give two or three doses before leaving, and many times the patient is on the road to recovery before your first visit is over. Your patients will recover from acute diseases in much less time and your death-rate in the same class of cases will be so much less than formerly that you will be greatly surprised.

Last month I was asked by a man, whose family I have treated for many years, how my results compared now with my former practice of writing prescriptions. My answer was that now, in the same class of diseases, of the same average grade of severity, the patients recovered in from one-half to one-third less time than under the method of prescription writing. The death rate has decreased in a much greater proportion. I am entirely within the limits of truth when I say my death-rate now in acute diseases is not over one-fifth of what it formerly was—and I attribute this gain

entirely to dispensing drugs I can give with confidence in their activity and in which there is no adulteration or sophistication.

Up to about ten years ago I might have been classed as a therapeutic nihilist. I had been so often deceived and disheartened over the results from my prescriptions that I had come to believe that recovery was largely a matter of good nursing and vitality of the patient and that medicine was of secondary or no importance at all, and that the only real results we ever got was in surgical cases. Gradually the idea came to me to do my own dispensing, to study the physiological effect of every drug used; then watch for the effect every time I prescribed a remedy, and if I didn't get the physiological effect to try to find the reason why. I soon learned that the products from the different manufacturing and pharmaceutical houses varied tremendously. While one remedy from a house would prove true to action every time, some other drug from the same house would be practically inert. This happens with the products of most of the largest and best known manufacturing drug companies. Every firm has some specialties which no other house seems able to more than imitate, though they try to produce the same. I might mention Squibb's ether and chloroform, Sharp & Dohme's ergotole and lapactic pills, Lloyd's tinctures, Abbott's alkaloids, Merck's line of chemicals.

It will be instructive to those of you who have never had your attention called to it to take so common a drug as salicylate of soda and compare by looks Merck's pure crystals with the much more commonly used product made by another large house. You will be more surprised when you see the large doses of Merck's you can give without getting the disagreeable nausea and ringing in the ears you get from the other. Your surprise will increase in proportion to the number of chemicals you compare. Some time since I had a ten thousand bottle of hyoscyamine granules made by one of the largest and oldest



Cotin is claimed to be of service both in checking night sweats and in tuberculous diarrhea.—*Summary.*

Crandall says that hiccough in infants is often relieved by putting a few grains of sugar in the baby's mouth.



houses in the United States, but I could get no adequate effect from the ordinary doses. I soon learned I had to give five times the dose from this bottle that I needed to use with the same sized dose made by Abbott. Now, had I been writing prescriptions for this remedy to be filled at any drug store, how would I have known what dose to prescribe? No matter how honest the druggist when he buys from an old reputable house, he can not be blamed. It is not his business to watch the effect of the drugs he buys. I have learned by sad experience that even when we have learned the particular house making the best drugs and specify that make, it is very seldom we get what is called for if the druggist doesn't have that make but has some other make just as good. This is especially true in liquid preparations, where the opportunities for substitution are great. These objections might be met if the physician owned a silent interest in a store and controlled the buying, and if he could be sure all his prescriptions would be filled at this store, but the courts uniformly hold that when a prescription is once delivered to a patient it becomes his property, with which he can do as he pleases, have it filled where he likes and repeated whenever he likes, all orders written by the physician about not repeating notwithstanding. In the course of time most of us evolve some pet combinations for certain diseases. These combinations are in the nature of private property. We do not care to make them public property to be pushed by any enterprising druggist as his remedy. Most of the millionaire patent-medicine men have made their money by pushing the prescription of some doctor. I wonder how many drug stores there are in which some doctor does not have the privilege of studying the prescription files? The only way to control abuses is by keeping our business in our own hands.

Again, many preparations can not be made extemporaneously. I am told by manufacturing chemists that it takes a month to make the ordinary comp. syr.

of hypophosphites; that it takes so long before it is fit to be put on the market. I have for a long time used a modified hypophosphites, in which the dose of lime is very much increased over the official preparation. Now, if it takes a large manufacturing firm employing the best chemists and with every known facility for doing the work, a month to make a preparation they are willing to put on the market, what sort of a mixture would you be apt to get from an extemporaneous preparation put up in twenty minutes?

The following statement was recently made in a lecture before a body of prominent physicians:

"The reputation of the physician, and in equal measure his income, are in the keeping of his pharmaceutical purveyor, and he is practically helpless except in that he can change or control the source of supply at will." This truth is evident when it is remembered that the physician who writes prescriptions seldom or never sees the medicine dispensed.

Granting that the remedy is dispensed as prescribed, the common habit of so many of our druggist friends of making remarks to the patient or his family about the medicine and why the doctor is using certain drugs, the hidden knock, the sly remarks they make about the doctor's failures, and the suggestion they try the particular medical friend of the druggist; the comments on the doctor's poor writing and worse spelling, are made neighborhood gossip. A case recently was told me of a young physician settling in a city near here. Every prescription written by the new doctor was shown to all the older doctors in town and criticised to the public so harshly as in a short time to drive the young doctor out of town. I do not mean to imply that these criticisms apply to all druggists. It is my pleasure to know some who are competent, conscientious gentlemen, but the exceptions are so numerous I am not willing to trust either my reputation or my finances in their keeping. I have sometimes thought it would be more in accord with the pres-

Butler lauds apomorphine, 1-40 to 1-20 grain every three hours for the hacking coughs of chronic catarrhal pneumonia.

When there is leucorrhea and rheumatism in women with shifting pain try caulophyllin.

—Med. Summary.

ent order of affairs for the druggists to take down their time-honored mortars and their bright-colored show bottles and suspend in their places a collection of hammers. They might be labeled "just as good," and they would knock harder.

The following taken from the *Apothecary*, a druggists' journal, affords some food for thought: "The facts revealed by the recent aristol investigation in Chicago are horrible in the extreme, almost shattering one's faith in mankind. When 108 out of 139 supposedly reputable druggists are known to be criminally negligent, if not wilfully criminal, it makes one sick with disgust. These are strong words, but not so strong as the facts warrant. When a druggist, a pretender to professional standing, a claimant to at least ordinary intelligence, allows fuller's earth colored with oxide of iron to go into a prescription for aristol, as many of these men did, there is no excuse for him. True, most of the druggists assert they bought the stuff in good faith. That is, they admit they knew it was a substitute, but thought it was just as good and it was cheaper. Think of it! The pitiable spectacle a man makes in offering such an excuse! As another evidence as to the extent of the sale of this fraudulent stuff, it is said one jobbing house in one day sold 429 ounces—more than before in months. If the fact that the investigation was being made had not leaked out, it would have included every drugstore in the city."

From Government reports in the last year book of the department of agriculture, we read that from 50 to 75 per cent of the medicines dispensed by the druggist are either wilfully adulterated or are of inferior quality.

Samples of laudanum varied 500 per cent in strength, and other drugs varied in the same proportion. The solid extract of nux vomica should contain 15 per cent of the alkaloid; samples analyzed by Professor Wulling contained not a trace of the alkaloid instead of 15 per cent.

"Did any of you ever examine and taste a large number of the ordinary fluid extracts and notice how much alike they all taste? A peculiar, bitter, stale, dirty taste, entirely lacking the special aroma and taste peculiar to the green plant. Instead of the extract being made from the recent herb, it is more often made from dried, inert plants, gathered from any source, by anybody, at any time of the year—plants from which the active principles have evaporated." I have been told by men on the inside that some pharmaceutical houses in making fluid extracts use the same alcohol over and over on different plants. Alcohol extracts the alkaloids from plants. Let us follow this process a little way. The alcohol pure used on the first plant extracts most of the alkaloids from this plant. The alcohol is recovered and used on a different plant, extracting from this plant its alkaloids, but necessarily retaining part of the alcohol with the alkaloid from the first plant. Repeat this process on a dozen different plants and by the time the alcohol is used on the last you have a combination of the action of all the preceding plants or no action at all. Suppose a physician uses an extract like the above in gradually-increasing doses and fails to get any effect. Is it any wonder physicians lose faith in drugs? How we ever get any results by using drugs from such uncertain sources can only be explained on the ground that "the Lord is good to the Irish."

While I yield to no man in my appreciation of the benefits of deep study of pathology, bacteriology and chemistry of diseases, the practical end is the cure of our patients, and excluding surgical cases this must largely be done by the action of drugs. I am certain that the man who gives his own medicines will and does become a better therapist than the one who writes prescriptions. When you give a dose of medicine yourself and do not get the result, you have no druggist to put the blame upon. You know your own supply is defective and

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Stacy Jones recommends apocynum cannabinum in small repeated doses for sciatica.

—*Med. Summary.*

Hiccough:—Gargling; excite sneezing; hot infusion capsicum; Hoffman's anodyne; nitrite amyl inhalations.—*Summary.*

you must change the source of supply. Every agent who takes an order from me knows that prices have no weight unless their products are true to physiological action, and they also know they can never sell me the second lot of any product not true to action. I watch as I never did before the action of every drug I give, and I am getting to be a very firm believer in the efficiency of drugs.

I believe my experience is large enough so that I can make the statement that acute diseases are very much benefited and shortened by proper treatment. I know it is contrary to some very high authority, but I am bold enough to assert that such diseases as pneumonia, typhoid fever and whooping-cough are shortened and cured by drugs properly given at the right time, and in doses suited to give physiological results.

The Lord pity the pneumonia patient who falls into the hands of a doctor who does not believe in treatment and who has no faith in drugs.

I will go further and write myself down as enough of a heretic to say that cases of appendicitis, not of the acute fulminating type, can be relieved or cured by medical treatment.

I venture the assertion that the therapeutic agnostics in the profession today are every one prescription writers.

As a result of German nihilism, many of the leading text-books of the practice of medicine today are but little more than text-books on pathology. In looking through one of the latest and most popular works I was not so much surprised to read pages on diagnosis, etiology, pathology, and then to find the treatment disposed of in a short sentence.

The question is often asked why medical students do not know more about therapeutics. It is true most of them are anxious to learn what to do for diseases, yet they are graduated without practical training in the use of remedies; too little demonstration of the practical working of drugs, either on animals or

on patients. The student is surrounded by three fires: The laboratory professors fire at him all day quantities of chemical unknowns, bottles of bacteria, and pathological specimens by the pound. The clinical teacher wants the student all day, that the teacher may demonstrate his brilliant surgery or deliver his lecture on history, etiology and pathology. And each specialist is sure the student should devote all his time to that particular specialty. Thus it comes that the only time the doctor learns real therapeutics is after he is in practice at the bedside of his own patients, and I maintain that he will learn very much more and learn very much faster if he supplies his own remedies, procured from a reliable source every time. "And after all, isn't it infinitely more satisfactory, more scientific, more in keeping with the doctor's high calling to himself to give such medicines as are needed for the really sick? Active remedies for serious conditions should be given by the doctor himself and he should explain their use and the action that will result from their use." Thus you combine all the therapeutic efficiency of your remedy and add to it the powerful psychological effect of suggestive therapeutics. There is a right way of doing things. It is quite evident that in medicine to write a prescription to be dispensed from an uncertain source of supply is not the right way. To those who have had experience it is equally evident that bedside dispensing of active remedies is the right way. There is then no possibility of substitution or sophistication, no uncertainty as to efficiency or potency.

Does it pay?

When we have done to the best of our ability our whole duty to our patients, we must look to our own welfare. I know not how it is with others, but I know my families like the system of having the physician do his own dispensing.

There is an element of faith in medicine. Whether well or ill-founded, there is in the minds of many people



Sodium salicylate recommended for quinsy by the *Summary*. Did you ever try saturation with calcium sulphide?

Bulkley recommends increasing doses of *cannabis indica* for the treatment of senile pruritus.

a suspicion as to the prescription being filled as the doctor directs.

Among the poorer classes the item of drug bills in a long illness is a serious matter. In many a case have I seen the druggist get all the money the family had and I either waited a long time for my pay or never got it at all. I have never found my bills so easy to collect as since I began dispensing. It is the best system I know of for making office consultations and visits "cash." So many never think to pay cash for a consultation or a prescription, but when they also get a bottle of medicine or a box of pills they feel they have received something of definite value that calls for payment on the spot.

You can get better fees for your work. It is the most practical way of raising fees, thereby getting more for your own services, and at the same time you save your patients a great deal over what they would pay at the store.

The matter of expense is small. We can buy as cheap as the druggist. He buys pills, for instance, in lots of 100 to 1,000. Those I use in any quantity I get in lots of from 5,000 to 100,000. The difference in price between 1,000 lots and 100,000 lots will open the eyes of those who have never investigated. At the present time some of the pharmaceutical houses have seen the handwriting on the wall and are now giving physicians a better discount than the retail druggist gets.

It will increase the business and cash receipts of any physician who gives it a fair trial. Last year my collections were so nearly cash that I only had 7½ per cent of business done in 1904 to be collected at the end of the year.

"If you don't want to lose your business, fit your office to do the work. There is a demand for business doctors, those who make a business of their profession and all that pertains to it. The more businesslike the doctor, other things being equal, the greater will be the demand for his services and the greater the rewards. Blessed is the man

who makes two dollars grow where only one grew before, and nowhere is there more room for the extra dollar than in the doctor's pocket."

In conclusion, there are four good reasons why the physician should dispense. Any one alone of these reasons would be sufficient:

1. You save many more lives to your state and nation.

2. Your patients recover in much less time, thus a great economic saving to the family.

3. Under all circumstances your families like it better.

4. It pays the physician by increasing his business, his fees and his cash collections.

J. A. CLARK.

Chicago, Ill.



#### WORMS. CROUP.

You ask in the July CLINIC, "How could worms get into a child of that early age, fed upon sterilized milk?" I once had a case of a milk-fed child that passed a tapeworm. That case used to be a wonder to me. Now one day, while I was at a house, there came along an old cat, and to my wonder I saw the cat pass two joints of a tapeworm. Of course we are told of the necessity of intermediate hosts for the development of tapeworms. But what would have happened had a crawling baby swallowed those little female tapeworm joints? And is there no possibility that the eggs of other forms of parasites may be distributed in some similar manner?

In relation to the case of membranous croup that you report, I wish that the doctors would try thoroughly my old recipe, viz., dissolve oil eucalyptus (true) one ounce to four ounces alcohol. Take of this two drams and twenty to sixty



Putnam says he has checked dangerous nasal hemorrhage by the use of full doses of atropine hypodermically.

Equisetum hyemale is highly recommended in the treatment of cystitis and dysuria.

—Med. Summary.

drops of spirit of turpentine added to four ounces of sweetened water. Give of this a teaspoonful every quarter to half hour, till the membrane loosens. With this I usually run the third trituration of mercurous protoiodide, about one grain every two hours till it affects the bowels. With this course my death list has not been as large as the published statistics with antitoxin. I cured one this last winter who had the disease very severely and have used this means for at least twenty years.

In my opinion, based on thirty years of observation, the results of antitoxin treatment, as shown in the statistics published in the *Medical Record* of New York, and other journals are not a bit better than good eclectic treatment.

In my first year of practice in Hartford in 1874-5, when I treated these cases *ex cathedra* with iron and potassium chlorate, I lost seven out of seven cases, and turned heretic. Since that time I have never lost ten per cent of non-croupal cases. I have had as many as eight cases in one family, with no deaths, and have taken off membranes from tonsils—as large as a slice of lemon. Of late years, immediate isolation, with free fumigation with sulphur has nearly always limited the attacks to the primary patient, and that with no antitoxin. Last winter I had two cases taken at the same time, far removed. To the stronger I gave antitoxin; to the weaker, who had adenoids and who developed a nasal membrane, I gave none and she recovered as quickly and as fully as the other. I suppose that I am an awful heretic, but my cases are on my books, and my dead are on record.

F. H. WILLIAMS.

Bristol, Conn.

If you will read over again the article describing that case of "worms" you will find that the first spasm occurred when the child was "a few days old." Even if the opportunity for infection had been present the worms would hardly have developed enough to cause symptoms at that early age. And it is a remarkable fact that no worms were seen until the child was seven years old.

Thanks for the suggestion concerning the treatment of membranous croup. It will doubtless prove of service to our readers. But why should we think that the use of antitoxin precludes all other treatment? There is no good reason why it should. The value of antitoxin may now be considered as established—though not the "last word." For internal use calcium sulphide to saturation. Try it and report results.—ED.



#### LARYNGEAL DIPHTHERIA.

I have just finished reading the article of F. M. A., Iowa, in the July CLINIC. It brings so vividly to memory a similar case in my own practice in 1902-3, that I feel that it might be of some benefit to report it. I was called, December 24, to see a little boy two years old. His breathing was hoarse and croupy and there was very slight fever. I examined the throat and found nothing abnormal—no membrane, no inflammation nor swelling. The family said that the babe choked sometimes, so I diagnosed simple croup.

I called the next day and found the boy much improved on the remedies prescribed the day before, in fact, there seemed to be nothing wrong with the boy at this time. Everything was all right until the 28th, when I was called,



Enuresis cured in five days by one granule of cantharis administered every three hours.  
—*Med. Summary.*

Malsbury says that he has tried tuberculin as a tonic in male sterility and impotence; acts better than other remedies.—*Lancet-Clinic.*



but the boy seemed to have had just a light attack and was all right again. Then I had telephone reports on the 29th that were favorable, the father stating that the boy was all right.

On January 1, the father came to my office and reported that the boy was well. But January 3, about 4 o'clock a. m., I was called by telephone to come in a hurry, as the baby was very bad. It was a nine miles' drive so it took probably an hour to get there, and I found the boy looking as though he was dead and the family had given him up. In justice to myself I must say that I had suspected that I was dealing with a case of membranous croup and at this time it certainly was plain enough, though it was the first case I had ever seen and by the way the last one.

I do not remember all of my treatment, but the principal thing was calomel fumigations. I wanted to give calcium iodized but had none and could not obtain it in time to do this case any good. It was a new drug in my practice then, but I will say that it is on my shelf constantly now.

As I have said, on my arrival on the third of January, the case had taken on a very hopeless mien. Yet I could discover nothing abnormal in the throat, such as membranes or inflammation. I determined as a last resort to use diphtheritic antitoxin and push the calomel fumigation. I instructed the family further in regard to the fumigating process and started on a twelve-mile drive to procure the antitoxin. I visited several drugstores and found it in the last one. I jumped into my buggy and laid whip to the horses and arrived at 1 p. m., expecting to hear news of the babe's death,

but was thankful to find it was still living, though it looked as if it would soon pass away. I gave 500 units of the antitoxin and kept up the fumigation. At nine that evening I returned and found the little one improved and injected 500 units more. January 4, I returned and found the babe much better and injected 1,000 units, and on the 6th 1,000 more, though I did not really think the last dose necessary. On the 4th he coughed up a membrane that resembled a small stocking leg.

I had grave doubts as to whether the antitoxin would benefit the case or not, but there was a chance. There was no diphtheria in the neighborhood at that time and none developed from that case, and it was not isolated from the rest of the family as it should have been. I shall not ask for criticism on this case for the reason I can see many places that I was lame in both diagnosis and treatment, but I can excuse myself on the ground that it was my first case, and that I was far out in the country and alone. But it is likely that the calcium iodized would have proven useless in this case, as the evidence I think is strongly in favor of laryngeal diphtheria. The only and great consolation is that I saved the boy and he is hearty and well today. I had thought of tracheotomy and should have performed it only as a last resort, as the prejudice against the knife in the country is very great. I stated in the body of this report that this was my last case. I will say that I have had many since that began the same way but were cut short by the energetic use of iodized lime.

P. C. KELLEY.

Harrisburg, Ore.

In 43 married gonorrheics Heidingsfeld found 12 fruitful and 31 sterile. In gonorrhea, 61 per cent sterile; in syphilis, 22 per cent.

Lier and Acher attribute 40 per cent of the sterility to gonorrhea; this disease causative both in male and female.

There are cases such as you describe in which the diagnosis is certainly difficult. Where symptoms are masked by absence of membrane, as in some laryngeal cases, it certainly is no easy matter to say positively that a certain case is or is not one of diphtheria. The safest plan is to be on guard in all cases of sore throat, especially if there is associated a considerable amount of debility, out of proportion to the local symptoms. Every suspicious case should be treated as if it were diphtheria, giving antitoxin by all means.

Nevertheless, in the case of catarrhal croup and ordinary affections of the upper air tract, calcium iodized is the remedy and should be used energetically. Where antitoxin is not to be had for any reason, and there is good reason to believe you are dealing with a case of diphtheria, calcium sulphide is the remedy and should be given to saturation alone, or with calcium iodized.—Ed.



#### SUPPORT FOR OPEN SORES.

On page 615 of the June CLINIC is a novel but practical support for open sores by Dr. L. T. Clason. I thought I was the only user of that, so far as published. About eight years ago I hit on the scheme from having some very troublesome varicose ulcers which would not heal under any treatment. Since then I invariably use it in tibial ulcers and others where there seems a disposition on the part of the wounds to gape.

In place of the tape reinforcement on the edge, I simply fold over as much of the adhesive plaster, to make the reinforcement and to cover the wound. This



In phthisis there is increased sexual capacity; while in diabetes there is usually impotence.—Hoppe, *Lancet-Clinic*.

makes a smooth surface which will not press into the wound and will keep the dressing from sticking.

F. W. SOUTHWORTH.

Tacoma, Wash.



#### SAVED BY THE SKIN OF HER TEETH.

In the *Am. Journal of Dental Science* for July H. J. Jaulusz, D. D. S., New York City, gives an interesting account of a woman who was confined in an institute for the insane—and had been therein confined for some months—when all that was the matter with her was six loose amalgam fillings, under which a mass of decayed food stuff and dentine served to set up an inflammatory condition, which caused not only excruciating pain but made it impossible for the mouth to be closed or articulation to be perfect.

The doctor got into the patient's room with her son in the guise of a visitor, and after examining the woman realized that ten minutes' work would make her a "rational" and well woman. He sent the son to borrow some forceps and in the meantime in the reception room had a seance with the physician in charge. This gentleman told him that it was hard to make a layman understand what ailed the woman, but that as he could note she was *non compos* and imagined she could not shut her mouth, "and we have to humor her." The dentist in his anger said things, and the doctor wanted to know how he dared to get in and upset the quiet tenor of the place. The forceps arrived, the dentist went up to the woman's room, shut the door and began to pull teeth. The

The morphine habit almost always causes impotence while the liquor habit does not directly.—Hoppe, *Lancet-Clinic*.

doctor and an orderly tried to force their way in, and finally a local sheriff came and did get in.

But the teeth were out, the woman could shut her jaws and talk, and the dentist being young and impulsive did more things to the sheriff, who had no warrant and "exceeded his authority." In the turmoil, dentist, woman and her son left, and later the man of teeth had the pleasure of being the guest of honor at a family reunion.

The moral is plain: don't imagine that everyone who does odd things is mad, and don't fail to make a thorough examination and find out the cause of conditions which exist before accepting them as "incurable." Many a set of puzzling symptoms has vanished upon the removal of some obscure (but very palpable when found) focus of irritation. The doctor who would win out needs to have eyes in his finger tips, brains in his calvarium, and just enough pugnacity in his constitution to never know when he is licked.



#### A PRESCRIPTION FOR "PRAIRIE ITCH" WHICH BECAME POPULAR.

Some months ago we published a letter from Dr. Mayer, of Osmond, Neb., in which the doctor stated that he had a remedy for prairie itch which was practically infallible. The formula was at the service of any doctor who had time and inclination to write for it and who would enclose a two cent stamp for reply, but the editor was requested not to print the prescription for the benefit of the "drones" of the profession—those who, as the correspondent put it, "would

grow fat on the labor of others." The doctor said that he didn't propose to gather therapeutic honey for *them* but hadn't the slightest objection to sharing his good things with other busy men.

We published a notice to this effect in the May number of the CLINIC, and some time later received the following statement from Dr. Mayer, which serves to show that to pique curiosity is a dangerous thing and also that the CLINIC is read "from Dan even to Beersheba"—and in the suburbs thereof!

"If any physician finds time hang heavy upon his hands for a spell, let him offer to his medical *confreres* a favorite prescription in the way I offered one of mine in the May CLINIC. He will soon find himself working from morning to night answering a flood of letters coming from one end of the country to the other. From the issue of the May CLINIC to the present time (May 15) I have answered 123 inquiries for my 'prairie itch' formula. I have received letters from Maine, California, Texas and Wisconsin, most of them from Texas, Kansas, Nebraska and Iowa, however. All these inquiries offered a good 'study of human nature.' Most of them were polite requests for my formula, offering to be grateful for the favor, some of these even sending me some one or several of their own favorite formulæ; others were quite sarcastic in their remarks on the claims I made for my remedy, almost 'daring' me to produce something better than they had to offer themselves—yet asking for my formula just the same! To all these my formula was sent and they are welcome to it. A few men, however, failed to enclose stamp or stamped envelope for a reply. It is a small matter, but if my



Neurasthenia is probably the most important single factor in impotency; general weakness back of it.—Hoppe, *Lancet-Clinic*.

Only the small minority of the impotent acutally attribute their weakness to sexual abuses or excesses.—Hoppe, *Lancet-Clinic*.

formula is not worth two cents to them, they—or their patients may go on scratching till Doomsday for all I care. No reply was made to these gentlemen."

It is evident from the above that the interest in prairie itch is not only intense but widely spread, and the need of really effective remedies pronounced. In *The Surgical Clinic*, 1903, we dealt with this subject at some length and published the following formula which gives about as good results as any—and much better than most:

Red mercuric oxide .....oz. 1-2  
Hydrarg bichlor. corros....dr. 4  
Pulverized resin (opt).....oz. 1  
Balsam Peru .....oz. 1  
Adipis (dehydrated) .....oz. 8

The resin is melted with the lard, the other drugs are powdered and added and when nearly cold the balsam of Peru is stirred in. The ointment is applied after the skin has been washed with tincture of green soap. The writer has recommended also, ichthyol, dr. 2; resorcin, dr. 1; sulphur (resublimed), dr. 1; lanolin, oz. 1-2; vaseline (alba), oz. 1-2.

Either of these formulæ will cure many cases and probably, as we have pointed out, both will fail in some other instances, for all sorts of skin diseases—even variola—are called "prairie itch." This disease *is not the "itch" proper* at all and we have not found any better description of the disorder than that which appeared in *The Surgical Clinic*, for May, 1903.

The Mayer formula offers sulphur and balsam Peru as its chief medicinal ingredients. Personally, we believe that the original formula containing resin and corrosive sublimate with red mercuric oxide and balsam of Peru is the better,

but experience alone can decide that matter. However, that may be, the one thing essential in all cases is a thorough preliminary scrubbing—in a modified sense—with soap and water. The tincture of green soap, or a liquid antiseptic soap of the market, acts better than any ordinary soap, but if these are not available a good soft soap or castile soap will do. Cheap and extremely alkaline soaps are injurious.

Internally, sulphur, arsenic sulphide and strychnine arsenate, with calcium iodized and alteratives such as alnuin, chimaphilin and rumicin will be called for, after a thorough and preliminary cleaning out of the intestinal tract with calomel and magnesium sulphide. Tonics are essential after the disease has been controlled. In this connection it would be interesting to note the action of the two new, highly-lauded antiseptics—alphozone and acetozone. The CLINIC will be pleased to have reports of practical results or clinical experience from the Family.



#### A WORD OF ENCOURAGEMENT.

"We are with you." And you are with us, Thank Heaven! We need some one with us. What are we coming to, when we are gliding into the habit of prescribing an unknown mixture—with a nice name—for some disease, just because it is "highly recommended" by the proprietor? Let us return to scientific medicine and give to the sick the drugs that will help them. And we are finding out that the best "drugs" are the alkaloids.

EDWIN MEEKER.

Lawton, Okla.



Schein reports success in the treatment of venereal warts with the ethyl chloride spray; one application enough.

Short says that fully 65 per cent of all cases of adenoids present some ear complications.

—Hot Springs Med. Jour.

Here is something that pleases us—a genuine heart throb from the prairie, out where the winds blow and the grass is fresh and green—out where a man can think clean, can appreciate.—Ed.

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**FOR FLAT-FOOT.**

Buy a pair of flat-foot supporters from Betz, the size of the shoe your patient wears and make the patient use them. After wearing them a few days try to buy them from her and see what she says. We have had three cases of flat-foot. Used electricity, constitutional treatment, etc., without benefit, and cured every one with one of the above little appliances.

OTTO KNOLLE.

Industry, Tex.

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**A WORD WITH "THE TWINS."**

I read with much interest your article on page 694 of the July CLINIC. Human nature is much the same the world over. Few men can sit unmoved while receiving the darts of ill-natured criticism, yet criticism has been one of the rewards of every great movement or character in the world's history. Let them fling their nasty criticisms at you. It is the penalty you must expect for the work you are doing. Let them deride alkalometry. It will stand on its own merits, notwithstanding. Your own success and the success of alkalometry are proofs of this statement.

As alkalometry becomes better known it will become more generally used, hence I say, push, *push*, PUSH! Let them cry commercialism, why need you care? Your goods will stand the test

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Therefore, I say to you, as one having authority to speak, keep up the standard and hammer the truth into the heads of the careless and the non-believers. Pay no attention to the jealous sneers of your enemies and competitors (jealous because you have something better, and are successful), and your joys and your rewards will, day by day, grow greater to the fulness of your time.

J. M. SWETNAM.

Phoenix, Ariz.

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Many thanks, Doctor, for your kindly appreciation. If it were not for such words from such men as you, we would have quit long ago and told the profession to go to Milldam with their darned old scows, and if they weren't willing to be helped they could just help themselves. But back of the profession is humanity; and the cry of the suffering has long since drowned the voice of personal feeling with us.—Ed.

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#### WHY THE POSTOFFICE DOESN'T PAY.

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The trouble with the Postoffice Department is this: Those who represent the people are in league with the railroads to rob the people. And, in spite of that, the national postoffice gives an infinitely better and infinitely cheaper service than is given by any private corporation of any kind whatever.—*Chicago American*.

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doctor and an orderly tried to force their way in, and finally a local sheriff came and did get in.

But the teeth were out, the woman could shut her jaws and talk, and the dentist being young and impulsive did more things to the sheriff, who had no warrant and "exceeded his authority." In the turmoil, dentist, woman and her son left, and later the man of teeth had the pleasure of being the guest of honor at a family reunion.

The moral is plain: don't imagine that everyone who does odd things is mad, and don't fail to make a thorough examination and find out the cause of conditions which exist before accepting them as "incurable." Many a set of puzzling symptoms has vanished upon the removal of some obscure (but very palpable when found) focus of irritation. The doctor who would win out needs to have eyes in his finger tips, brains in his calvarium, and just enough pugnacity in his constitution to never know when he is licked.



#### A PRESCRIPTION FOR "PRAIRIE ITCH" WHICH BECAME POPULAR.

Some months ago we published a letter from Dr. Mayer, of Osmond, Neb., in which the doctor stated that he had a remedy for prairie itch which was practically infallible. The formula was at the service of any doctor who had time and inclination to write for it and who would enclose a two cent stamp for reply, but the editor was requested not to print the prescription for the benefit of the "drones" of the profession—those who, as the correspondent put it, "would

grow fat on the labor of others." The doctor said that he didn't propose to gather therapeutic honey for *them* but hadn't the slightest objection to sharing his good things with other busy men.

We published a notice to this effect in the May number of the CLINIC, and some time later received the following statement from Dr. Mayer, which serves to show that to pique curiosity is a dangerous thing and also that the CLINIC is read "from Dan even to Beersheba"—and in the suburbs thereof!

"If any physician finds time hang heavy upon his hands for a spell, let him offer to his medical *confreres* a favorite prescription in the way I offered one of mine in the May CLINIC. He will soon find himself working from morning to night answering a flood of letters coming from one end of the country to the other. From the issue of the May CLINIC to the present time (May 15) I have answered 123 inquiries for my 'prairie itch' formula. I have received letters from Maine, California, Texas and Wisconsin, most of them from Texas, Kansas, Nebraska and Iowa, however. All these inquiries offered a good 'study of human nature.' Most of them were polite requests for my formula, offering to be grateful for the favor, some of these even sending me some one or several of their own favorite formulæ; others were quite sarcastic in their remarks on the claims I made for my remedy, almost 'daring' me to produce something better than they had to offer themselves—yet asking for my formula just the same! To all these my formula was sent and they are welcome to it. A few men, however, failed to enclose stamp or stamped envelope for a reply. It is a small matter, but if my



Neurasthenia is probably the most important single factor in impotency; general weakness back of it.—Hoppe, *Lancet-Clinic*.

Only the small minority of the impotent acutally attribute their weakness to sexual abuses or excesses.—Hoppe, *Lancet-Clinic*.

formula is not worth two cents to them, they—or their patients may go on scratching till Doomsday for all I care. No reply was made to these gentlemen.”

It is evident from the above that the interest in prairie itch is not only intense but widely spread, and the need of really effective remedies pronounced. In *The Surgical Clinic*, 1903, we dealt with this subject at some length and published the following formula which gives about as good results as any—and much better than most:

Red mercuric oxide .....oz. 1-2  
 Hydrarg bichlor. corros.....dr. 4  
 Pulverized resin (opt).....oz. 1  
 Balsam Peru .....oz. 1  
 Adipis (dehydrated) .....oz. 8

The resin is melted with the lard, the other drugs are powdered and added and when nearly cold the balsam of Peru is stirred in. The ointment is applied after the skin has been washed with tincture of green soap. The writer has recommended also, ichthyol, dr. 2; resorcin, dr. 1; sulphur (resublimed), dr. 1; lanolin, oz. 1-2; vaseline (alba), oz. 1-2.

Either of these formulæ will cure many cases and probably, as we have pointed out, both will fail in some other instances, for all sorts of skin diseases—even variola—are called “prairie itch.” This disease is *not the “itch” proper* at all and we have not found any better description of the disorder than that which appeared in *The Surgical Clinic*, for May, 1903.

The Mayer formula offers sulphur and balsam Peru as its chief medicinal ingredients. Personally, we believe that the original formula containing resin and corrosive sublimate with red mercuric oxide and balsam of Peru is the better,

but experience alone can decide that matter. However, that may be, the one thing essential in all cases is a thorough preliminary scrubbing—in a modified sense—with soap and water. The tincture of green soap, or a liquid antiseptic soap of the market, acts better than any ordinary soap, but if these are not available a good soft soap or castile soap will do. Cheap and extremely alkaline soaps are injurious.

Internally, sulphur, arsenic sulphide and strychnine arsenate, with calcium iodized and alteratives such as alnuin, chimaphilin and rumicin will be called for, after a thorough and preliminary cleaning out of the intestinal tract with calomel and magnesium sulphide. Tonics are essential after the disease has been controlled. In this connection it would be interesting to note the action of the two new, highly-lauded antiseptics—alphozone and acetozone. The CLINIC will be pleased to have reports of practical results or clinical experience from the Family.



#### A WORD OF ENCOURAGEMENT.

“We are with you.” And you are with us, Thank Heaven! We need some one with us. What are we coming to, when we are gliding into the habit of prescribing an unknown mixture—with a nice name—for some disease, just because it is “highly recommended” by the proprietor? Let us return to scientific medicine and give to the sick the drugs that will help them. And we are finding out that the best “drugs” are the alkaloids.

EDWIN MEEKER.

Lawton, Okla.



Schein reports success in the treatment of venereal warts with the ethyl chloride spray; one application enough.

Short says that fully 65 per cent of all cases of adenoids present some ear complications.  
 —*Hot Springs Med. Jour.*

Here is something that pleases us—a genuine heart throb from the prairie, out where the winds blow and the grass is fresh and green—out where a man can think clean, can appreciate.—ED.

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#### FOR FLAT-FOOT.

Buy a pair of flat-foot supporters from Betz, the size of the shoe your patient wears and make the patient use them. After wearing them a few days try to buy them from her and see what she says. We have had three cases of flat-foot. Used electricity, constitutional treatment, etc., without benefit, and cured every one with one of the above little appliances.

OTTO KNOLLE.

Industry, Tex.

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#### A WORD WITH "THE TWINS."

I read with much interest your article on page 694 of the July CLINIC. Human nature is much the same the world over. Few men can sit unmoved while receiving the darts of ill-natured criticism, yet criticism has been one of the rewards of every great movement or character in the world's history. Let them fling their nasty criticisms at you. It is the penalty you must expect for the work you are doing. Let them deride alkalometry. It will stand on its own merits, notwithstanding. Your own success and the success of alkalometry are proofs of this statement.

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three or four times as much as the express companies pay, while at the same time they get two prices for parcel carrying! Why? Just because, by the very force of money and influence, they can and do corner or control conditions, coerce legislators and bulldoze the very government under which they exist. "What is the remedy?" Kill graft and give us a parcels' post, owned, controlled and run by the government, who should not only add this to our postal service but the telegraph lines as well.

Doctor, it would be one of the greatest conveniences and helps to you and your business neighbors possible. Let's we of the CLINIC family and our neighbors petition for it a hundred thousand strong. Suppose you use the following form and send as big a one as you can:

#### A PETITION TO CONGRESS.

*To the Senate and House of Representatives of the United States:*

We, the undersigned, beg to call to your attention the necessity for a parcel post law.

Bills have been introduced in Congress, but have never come to final passage.

The parcel post will make possible the shipment of small packages by mail at a less cost than is now charged by express companies.

A parcel post will make possible the sending of packages to points not reached by express companies. The parcel post will be a convenience to all the people and will give to the American postal system a department that has been tried by other countries and found to be of greatest value.

We respectfully petition the Congress of the United States that such a law be passed.

Name .....  
Address .....  
Town .....  
State .....

Now practically every state has a good medical law and the four-year college course is well-nigh universal. Illinois Board led!

Paste or rewrite it on a long sheet of paper, fill it full and send it in. We will collect them here at the CLINIC office for the next few months and then send them to Uncle Sam. It's worth an effort, Doctor. I hope you will make it.



#### ACUTE OBSTRUCTION OF THE BOWEL.

I submit here the report of three cases remarkable for their occurrence in so short a period of time and within a radius of five miles, in a country practice.

CASE I. Miss D., age 21. Previous history nil. On Saturday noon, Nov. 26, 1904, she ate an unusually hearty dinner; about 7 p. m. she complained of pain in the region of the stomach of an intermittent character and vomited shortly after. The pain alternated with vomiting all night. Sunday, Nov. 27, at 9 a. m. I saw the patient for the first time. She was then suffering from steady pain in the region of the stomach. Deep pressure over the abdomen elicited no circumscribed tenderness, but there was a slightly tympanitic condition. Pressure over the stomach produced considerable pain. The ejecta consisted of the meal eaten Saturday noon. The bowels had not moved since Saturday morning. Temperature normal, pulse 120. Diagnosis, gastralgia, atonic in form. I prescribed chloranodyne for the pain and tr. nucis vom., 1 dram; elix. lactated pepsin, oz. 4. M. Sig. Teaspoonful every three hours. I left with directions to report if she was not better soon. I also ordered a laxative.

Tuesday, at 3 p. m., a messenger reported the pain very severe, vomiting every three or four hours; the bowels



Blumer says that before the island of Cuba was occupied by the Americans in 1898, yellow fever had existed there for 130 years.

had not moved as yet. I had just got in from a sixty-mile drive so sent out saline laxative and morphine for pain. Eight a. m. Tuesday the patient had an anxious, haggard appearance. Pain was coming in waves across the abdomen and the tympanitic condition was exaggerated. Temperature was normal, pulse 140. She was vomiting bile. I made a diagnosis of obstruction. Treatment: I discontinued physic, gave high enemas, soap and warm water hourly, but with no result. At noon I telephoned for counsel and at 2 a. m. he arrived. The patient was now vomiting fecal matter. The doctor confirmed my diagnosis but wished to use enemas himself. I urged immediate laparotomy. He wished to wait until morning, urging poor light.

In the morning we sent for another physician, who did not arrive until Thursday morning. We operated immediately and found the bowel bound down by diverticula, three in number, in the region of the ileo-cecal valve. We excised some bowel of a dark bluish color from venous engorgement. The patient died at five p. m. Saturday from acute infection.

An unsuspected peritonitis at some time prior very likely produced these bands.

CASE II. Mr. M., age fifty-five years. Thursday, December 29, while working on a building he felt pain just above the crest of the ileum on the left side. The pain which was of intermittent character at first gradually became continuous and extended over the entire abdomen. It continued all Thursday night, and Friday he began vomiting. The vomiting alternated with pain all day and until 1 a. m. Saturday when it left.

He felt fairly well Saturday and rode a few miles in a buggy. Saturday at 7 p. m. the pain started again and vomiting continued all night. Sunday a. m. I saw the patient for the first time. Pressure over the abdomen elicited very little pain but just above the crest of the ilium and toward the umbilicus there was found to be a spot tender to pressure. Bowels slightly tympanitic. Temperature normal, pulse 110. Bowels had not moved since Wednesday. He remarked upon this and said he could not remember when his bowels had not moved daily. Diagnosis, obstruction.

Treatment.—High enemas of soap and water, with the hips elevated and repeated hourly. Epsom salt, 2 ounces of a saturated solution, was given every two hours for three doses, then discontinued. Monday forenoon there was no change but the pain was not so severe and he had vomited but twice in twenty-four hours. Enemas continued hourly. Monday at 3 p. m. the bowels had not moved. Epsom salt as before every two hours for three doses. Monday at 10 p. m. the bowels moved. Tuesday at 9 a. m. I found the patient sitting by the stove feeling a little weak but otherwise well. Temperature normal, pulse 80. Very slight tenderness in bowel. I prescribed olive oil a wine glassful before meals, and discharged the patient.

This case was undoubtedly one of fecal obstruction.

CASE III. Mrs. W., age 49. Previous history: Feb. 18, 1904, she accompanied her husband to St. Francis Hospital, Wichita. On February 22 Dr. C. E. Bowers removed the ovaries and uterus for cystic degeneration and fibroid. She recovered and came home in April. On



The story of the remarkable change in the yellow fever history of Havana reads almost like a romance.—Blumer, *Jour. A. M. A.*

There is now opportunity for a repetition of this work on our own soil. May the results be equally brilliant at New Orleans!

November 16, 1904, she accompanied her husband to Kansas City at which time Dr. Minor operated for piles and also removed a number of ulcers at the neck of the bladder. She recovered and came home December 10, 1904. At 1 a. m., January 9, I was hurriedly called and found her sitting up in bed with her hands pressing deep into the abdomen on each side and crying out with pain. She had been subject to pain in the abdomen, during which attacks I had treated her, both before and after the operations mentioned. Upon questioning her however, she said, "This is an entirely new condition. I have never suffered this kind of pain before. It comes in waves." There was vomiting, pulse of 120, temperature normal. The bowels had moved at 7 p. m. the evening before and three times during the day before. Diagnosis, obstruction. The treatment was morphine hypodermically for pain. She rested fairly easy until 7 a. m. when the pain recommenced. Another hypodermic was given and I called for counsel. He diagnosed bilious colic. I still held to my opinion however. We gave during the day several doses of morphine and also high enema with no result, she vomiting twice during the day. At 7 p. m. Monday the doctor asked to be allowed to give a saline and I finally agreed. In fifteen minutes a distinct tumor made itself manifest in the region of the ileocecal valve and at 7:30 p. m. she vomited. The doctor immediately agreed with my diagnosis.

At 10:15 p. m. we started on our way to Wichita. We drove twenty-five miles in the darkness in two hours and forty minutes, and just five minutes before train time we drew up at the depot. At

noon Tuesday we arrived at Wichita. In one hour Mrs. W. was on the operating table and in twenty-eight minutes Dr. Bowers had found the obstruction, a diverticulum in the region of the ileocecal valve producing strangulation, had removed the same and she was in her room. Today, six days afterward, she is doing well and will undoubtedly recover. Following the operation she was given an enema of equal parts of glycerin and turpentine to establish peristalsis.

This concludes a series of cases extending over a period of forty days and is I believe rather a remarkable coincidence, occurring as it has in a rather thinly settled country and within a radius of five miles.

This diverticulum causing the strangulation was undoubtedly a product of the reparation following the laparotomy in February, 1904.

Acute obstruction of the bowels is a condition fraught with imminent danger from its onset and each hour following its appearance only adds its measure of death to the stricken one. It must necessarily follow that its early destruction by prompt surgical interference should form the only basis of treatment.

What can be more hopeless than the attempt by means of enemas to open a bowel bound down by adhesive bands? The symptoms of fecal obstruction, volvulus, intussusception and intestinal strangulation are so much allied that it is almost impossible to differentiate between them. With the possible exception of fecal obstruction an early laparotomy affords practically the only certain relief.

Appendicitis may simulate intestinal obstruction. In this you may have con-



Read Henrotin's fine address on the Commerce of Surgery in the *Jour. A. M. A.*, number for July 15.

In your heart of hearts you know that the almighty dollar is the prime object in these latter days.—Henrotin.

stipation, you will certainly get the pain wave due to exaggerated peristalsis and the sudden onset, but you will get also a rise in temperature, a condition you never find in the onset of intestinal obstruction. I am well aware that cathartics are dangerous in obstruction, but since case three it has occurred to me that where the diagnosis was in doubt, a saline cathartic by producing a tumor at the point of obstruction might possibly clear up the diagnosis and locate the point of obstruction.

DONALD MACLEOD.

May, Okla.

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This was certainly an unusual experience. Cases of intestinal obstruction are by no means common—fortunately. The results were as satisfactory as could be expected in this class of cases, though an early operation might have saved the life of the first patient. If forced to temporize in a case of this kind we should resort to the antispasmodic triad, hyoscyamine, strychnine and glonoin. Sometimes it acts magically in cases where operation seems imperative. But delay is not justified when there is certainty of diagnosis.—E.D.

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#### EXAMINATION OF THE SPUTUM.

Affections of the respiratory organs are usually accompanied by expectoration. Under this term is included all secretion discharged through the mouth, as a result of hawking and spitting, and especially coughing. The sputum is usually of great semeiologic significance, for it may furnish information in regard to the pathologic processes occurring within

the respiratory apparatus; and for the proper judgment of the essential constituents of the sputum an accurate knowledge of the anatomic structure of the respiratory tract is absolutely necessary.

In spite of the achievements of physical diagnosis the character of the expectoration often first decides the diagnosis. Sometimes the characteristic features are recognizable with the naked eye, sometimes only with the aid of the microscope. For instance, a stinking sputum mixed with tissue-threads often at once reveals the existence of pulmonary gangrene, while physical phenomena on the part of the lungs may perhaps be but slightly developed. On the other hand, microscopic examination of a stained specimen of sputum may assure a diagnosis of pulmonary tuberculosis at a period in which percussion and auscultation will not permit a diagnosis of this disease. These examples suffice to indicate that the macroscopic as well as the microscopic character of the sputum should be considered during examination.

A reliable examination is possible only when the expectoration is received unmixed with other matter in a clean vessel. The ordinary glass sputum tumblers are best and it is best to secure the sputum alone. After an examination in the glass, it is more thoroughly examined by spreading it upon a porcelain plate, one-half of which is blackened with asphalt varnish. The sputum should be spread upon the plate in the thinnest possible layer for the macroscopic examination. The following points should be observed: (1) The quantity of sputum, (2) the color, which is dependent upon the admixture of mucus, pus, blood and serum. Accordingly, there are mucoid,

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The whole American nation seems to have gone cash mad and American surgeons to have become tradesmen.—Henrotin.

Even though we minister to human life and comfort, have we not the right to look to our self-protection?—Henrotin.

purulent, serous and bloody sputa, and, according to its admixture, mucopurulent, mucohemorrhagic, etc.

The most important points to be remembered concerning the expectoration are the following: (1) Simple mucoid of a glairy or grayish-white appearance, and sometimes of liquid and sometimes of tenacious consistence; it occurs in every case of acute catarrh of the upper air passages and in bronchial asthma. (2) The mucopurulent expectoration which can be recognized at a glance by the separation of the constituents; this sputum is encountered in many cases of chronic catarrh and especially in pulmonary phthisis. (3) The pure purulent yellow sputum is most frequently expelled in pulmonary abscess and perforated empyema and also occurs in bronchoblennorrhoea. (4) Bloody expectoration occurs in a bright red and not rarely somewhat frothy form in hemorrhages from the pulmonary cavities or from aortic aneurism which has ruptured into the trachea. (5) Serous sputum is a transparent, whitish fluid and chiefly observed in pulmonary edema and tumors of the chest cavity. In inflammatory pulmonary edema it is more or less blood-stained and then resembles prune juice. (6) The tenacity of the sputum is chiefly due to the admixture of mucus; the sputum is usually extremely tenacious in pneumonia, asthma and neoplasms. (7) The odor. In fetid bronchitis it is more or less offensive; in gangrene, putrid and fetid; and the pus discharged from a ruptured empyema smells like old cheese. (8) The reaction is usually alkaline.

*Macroscopic Examination:*—If the sputum be spread upon a plate, as de-

scribed in the foregoing part of this paper, a number of peculiarities may be seen with the naked eye.

1. Rice bodies. These bodies—the famous corpuscular oryzoidea of the ancients—are found in the mucopurulent sputum of consumptives and especially in and between the nummular masses at the bottom of the vessel. They are smooth, white, yellow, opaque, flattened or biconvex bodies, varying from a pin-head to a lentil in size. These rice bodies are of great diagnostic value because they contain elastic fibers and tubercle bacilli.

2. Fibrin coagula. These occur in almost every case of croupous pneumonia. From the third to the seventh day of the disease they are slender, yellowish-white, or yellowish-red threads, from two to three millimeters thick and from one-half to several centimeters long.

3. Curschmann's spirals are found in the expectoration of asthma patients, rarely in other diseases; they are of a glassy or tenacious, seromucous, foamy nature.

4. Dittich's plugs are found in the sputum of fetid bronchitis and pulmonary gangrene; also in chronic abscesses of the lung and in phthisic sputum. They are whitish-yellow, smooth, pin-head to bean-sized granules; they have an extremely offensive odor, are of a cheesy consistency and contain numerous fat crystals and occasionally monads.

5. Tissue fragments. These are found almost exclusively in pulmonary gangrene and appear as grayish-yellow or occasionally as distinctly black shreds imbedded in mucoid pus.

6. Calcified concretions, or "lung



The fault is not ours especially; it is not the physicians only who are reaching out for pelf.—Henrotin.

In our little medical world the idea of fairness and the conception of justice is clearly crystalized.—Henrotin.



stones," are rarely observed in the sputum. I myself have never seen them.

The microscopic examination of sputum leads to a satisfactory result only when a critical scrutiny of the sputum has previously been made and it confirms many interpretations which a simple inspection of the sputum could render only probable.

In the microscopic picture there may be found as follows: (1) Red blood cells after a true hemorrhage. These appear not only unaltered in form but also in rouleaux. In the rubiginous expectoration they are seldom arranged in the form of rouleaux but are more isolated. (2) Colorless or white blood cells (pus corpuscles) constitute the majority of all the cellular elements observed in the sputum. They vary in size and form. Almost all of them are multinucleated and the majority present neutrophilic granules only.

In the sputum of asthma are found numerous eosinophile and basophile leucocytes. Terchmuller claims that an increase in the number of eosinophile cells in the sputum indicates a favorable prognosis, but this statement has not remained uncontradicted. (3) Epithelia, corresponding to the various kinds of epithelium present in the different mucous membranes lining the respiratory passages. There are found in the sputum, squamous, cylindric and ciliated epithelia. The first, is found in nasopharyngeal sputum; the second in acute catarrhs of the upper air passages; the third has been found in the sputum of patients suffering from severe asthmatic attacks. (4) Fatty detritus. This is formed by the fatty degeneration of the cells and is found in the sputum of pneumonia. (5)

Elastic fibers. These are found in phthisis and in syphilitic ulcers of the upper air passages but principally in pulmonary abscess and pulmonary gangrene. (6) Fibrinous coagula. These are found in croupous pneumonia and bronchitis. (7) Curschmann's spirals. These are exclusively found in the sputum of asthma.

The principal object of this paper is to give a short review of the bacilli that are of most interest to the general practitioner in the diagnosis of the commoner diseases, such as the tubercle bacilli for tuberculosis, the pneumococcus for pneumonia in doubtful cases, or which will enable him to ascertain if a patient with phthisis has had a previous pneumonia, as can almost always be seen, as the pneumococcus can be found in the sputum long after the occurrence of the disease.

Very numerous influenza bacilli are found in influenza and it is seldom necessary to examine the sputum to detect this disease as the symptoms in influenza are generally very prominent. As to streptococci and staphylococci, I will only mention them as to their influence in other diseases.

Tubercle bacilli.—In the examination of sputum for tubercle bacilli proceed as follows: Spread the sputum in a thin layer upon a new slide and dry by gentle heat over a Bunsen or alcohol flame. When dry put the preparation through the free flame a few times to fix it, then place the film side up upon an iron support and cover the slide completely with the following staining solution, called Ziehl-Nielsen solution, which is made as follows: Acid carbohc deliquesced, five parts; fuchsin crystals, one part; alcohol 98 per



This matter of commercialism will settle itself. Decoy traps to catch your brother will only heat the blood.—Henrotin.

Fee division is undignified, carries its own punishment and will eventually die out, except among a class.—Henrotin. \*

cent, ten parts; aqua dest., q. s. ad one hundred parts.

Now heat this solution on a slide with a Bunsen or alcoholic burner until it comes to a boil just once, then wash off the excess of stain in plenty of water and place it for a minute or two in a 5 per cent solution of sulphuric acid in water for the purpose of decolorizing the other bacilli which are not tubercle bacilli. Keep it in this solution long enough to decolorize it to a faint pinkish tinge, then wash in water and cover it with Loeffler's solution, which is made as follows: Concentrated alcoholic solution of methylene blue, thirty parts; 1 to 10,000 solution in water of caustic potash, one hundred parts. Stain with this solution for about two minutes, then wash it and dry over a flame and examine in cedar oil with a 1-12-inch oil immersion lens without cover glass.

With the above method success will almost always be attained, provided the sputum prepared contains tubercle bacilli, but occasionally Bidert's method must be resorted to for positive results. This is as follows:

Mix a tablespoonful of the sputum with two of water containing two drops of caustic soda. Boil the mixture with constant stirring until completely liquefied, then add five tablespoonfuls of water and bring to a boil several times and after some minutes pour into a conical glass where it is to remain for three days to sediment. Then pour off the liquid and triturate, then make your preparation from this sediment. Under the microscope you will observe the following picture: You will find the tubercle bacilli stained red and the staphylococci and streptococci stained blue. The tubercle

bacilli will be seen as slender and more frequently slightly bent than straight rods about one-fourth to four-fifths as long as the diameter of a red-blood corpuscle, and their ends are often slightly rounded.

The bacilli usually occur singly and seldom in pairs but sometimes they appear in groups of from five to twelve or more. Their presence in the sputum will always be a positive sign of tuberculosis and therefore, if you have a doubtful case send the sputum to a reliable microscopist, providing you cannot do it yourself, so as to get a positive diagnosis of your case and then you will know how to treat it without fooling around in the dark.

**Pneumococci:**—These are best stained with Loeffler's methylene blue solution as follows: Put the sputum on a new and clean glass slide and dry it with gentle heat and cover the slide with the solution for about two minutes and wash in water and dry again with gentle heat and examine in cedar oil with 1-12-inch oil immersion lens.

Under the microscope the cocci will appear dark blue and surrounded by a colorless capsule. They are always found in pneumonia and sometimes they will be found in the sputum of phthisis, when the patient has had a previous pneumonia, and they will be found in the sputum of a pneumonia patient six to twelve months after the attack.

**Influenza bacilli:**—These are usually found in great numbers and usually lie in clumps in the mucoid basement substance of the sputum. They are generally two or three times as long as wide. The ends are rounded and sometimes two short ones lie so close together that they greatly resemble diplococci. They are



The man who gets \$5,000 for removing a catarrhal appendix crucifies two fellows who are dividing a \$100 fee.—Henrotin.

We have little to worry about now, we surgeons. Business is good and getting better; but good business doesn't mean permanency

nonmotile and have no capsule. These bacilli are best stained with the carbolfuchsin solution, which should act for about ten minutes, but by heating the solution it will stain quicker and better. (Brooks.) After staining, dry and examine with 1-12-inch oil immersion lens.

Staphylococci and streptococci are best stained with Loeffler's solution and under the microscope they appear as follows: Staphylococci appear as bunches of grapes (Ogston) the line of division being very delicate. They are found in almost all sputum and it is claimed they were found in the blood in acute articular rheumatism, in endocarditis and in pleuritic effusion.

Streptococci under the microscope appear as rosary-like, long chains which appear to be composed of pairs united in a row. They are found in pneumonia, erysipelas, phthisis and in scarlet fever and diphtheria, in which latter disease the disease is quite often fatal, producing sepsis. In acute choleric form enteritis, which was fatal, their presence in the dejecta was in abundance. It is claimed that their presence in pulmonary tuberculosis is not favorable to a good prognosis, which to my knowledge has not been refuted.

As this paper is only a brief review of a few general points on this subject I would refer those who desire a more extensive knowledge on this subject to Dr. Herman Lenhardt's works, translated by Dr. H. T. Brooks, Professor of Pathology and Histology of the New York Post-Graduate School of Medicine. It is called "Clinical Microscopy and Chemistry," and the price is \$3.00 cloth. Dr. Brooks' pamphlet on "The Microscope in

Diagnosis with Practical Hints for Office Work" may be had for twenty-five cents.

WM. F. RADUE.

Union Hill, N. J.



#### KEROSENE IN OBSTIPATION.

I notice in the July CLINIC that you say that you have never used kerosene (coal oil) in obstipation or obstruction of the bowels. I used it in three cases, in all with success and with no objectionable symptoms. I injected a pint of the oil at once and repeated it several times. Then I used a soft rubber tube three feet long, inserting the whole of it. This enabled me to place the oil at the ileocecal valve where the trouble was located. I read of its use ten years ago. At first I hesitated but upon trial find it safe and efficient.

V. E. LAWRENCE.

Ottawa, Kans.



#### HOW SALINE LAXATIVES ACT.

Dr. G. Wilse Robinson contributes an interesting article on this subject to the July number of the *Kansas City Index-Lancet*. He shows that while moderately concentrated solutions of readily diffusible salts, such as sodium chloride, increase the readiness of absorption from the bowel, especially when blood pressure is low and peristalsis slow; on the other hand absorption is diminished when peristalsis is increased and in the presence of an hyperisotonic solution (one more concentrated than the blood) of a salt which is not readily diffusible, such as magnesium sulphate. The endosmotic equivalent of the saline cathartics is



What about the country practitioner who gives hours and gets dimes, while the surgeon gives minutes and gets gold?—Henrotin.

Baron N. Rothschild has left \$5,000,000 to the city of Vienna for hospitals for curable nervous diseases.

high, that of magnesium sulphate being 11.7 and of sodium sulphate 11.6; therefore, they can combine with and hold much water in the intestinal canal, thereby preventing its absorption. These salts do not and can not cause a transudation of fluid from the blood, tissues and lymph, as so generally believed; they do, however, if given in hyperisotonic solutions, combine with the normal secretions and prevent their absorption.

Dr. Robinson says that the saline salts are not irritating and do not stimulate muscular or secretory cells to activity. They act by reflexly stimulating peristalsis, mechanically, through the accumulation in the bowel of the unabsorbed water. This stimulation is distinctly stated not to be chemical but mechanical. If they are given in hypotonic solutions they lose some water to the blood; in isotonic solutions they lose none and do not interfere with resorption; in hyperisotonic they combine with enough of the normal secretions to render them isotonic. Therefore, since the quantity of water really determines the action, if you want quick action without depletion give dilute solutions of the salines; if you want slow catharsis with depletion give concentrated solutions.

When injected into the blood, Dr. Robinson says the saline cathartics cause constipation, thereby taking issue with some statements which have been made on this point. The magnesium and potassium salts, he says are toxic and may cause danger when given in very concentrated solutions, when there is low blood pressure.

This paper bears out the advantage of giving magnesium sulphate in dilute solution. It might be added that the ideal

saline laxative should contain or release carbon dioxide gas, which is the natural laxative developed by carbohydrate foods.

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#### A CRITIC CRITICISED.

Permit me to criticise "A Criticism," page 856, August CLINIC.

During the outbreak of Foot and Mouth Disease in the New England States, an enterprising chemist called the attention of inspector in charge (of the Bureau of Animal Industry) to a red powder which, when mixed with formalin solution, would generate the gas, and would do away with the troublesome alcohol lamp. Accidentally it was found out that the red powder was nothing else but potassium permanganate; and the chemist was greatly disappointed and learned a lesson that he could not fool the horse doctors; potassium permanganate and formalin solution, equal parts, was used after that for fumigation.

D. S. KANSTOROOM.

With Bureau of Animal Industry Chicago.

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#### EPILEPSY AND INTESTINAL ANTI-SEPSIS.

In the *Medical News*, Kemp contributes a suggestive article upon epilepsy. He calls attention to the dependence of this affection upon toxins formed in the alimentary canal and absorbed into the blood therefrom. He describes the case of a soldier, with marked digestive disturbances, following dysentery in the Philippines. Epileptic convulsions recurring more frequently, clearly followed extreme indiscretions in diet, and attacks of abdominal discomfort ushered in

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C. F. Martin treats internal hemorrhoids by the injection of a 50 per cent solution of phenol.—*Lancet-Clinic*.

Before injecting hemorrhoids divulse the sphincter under nitrous oxide anesthesia; not 15 per cent of recurrences.—Martin.

the paroxysms. Constipation, fetid stools, hyperchlorhydria, tympanites, etc., were features. He was deprived of red meats, smoking and drinking; placed on light diet, the bowels emptied and regulated; given intestinal disinfectants with soda for acidity; soda bromide, gr. 40 daily to break the habit, gradually diminished and finally stopped. No fits for four months; then several following lapses in diet, and no more.

This recalls several observations made by watchful clinicians, such as that recorded in the CLINIC some years ago by Dr. J. M. Evans.

Dr. Wm. H. Thompson has instituted a general research on this subject at the Manhattan State Hospital, in which each epileptic is examined in turn by each specialist, and every abnormality found corrected. The medication indicated is applied; the bowels carefully regulated; lavage if required; as intestinal antiseptics, soda benzoate, resorcin, soda salicylate, and soda sulphocarbolate; red meats eschewed; soda bromide with antipyrin given to lessen reflex excitability and break the convulsion habit; and an intelligent hygienic regime enforced. Examination showed that very few had the stomach in its normal position, and in these the secretions were abnormal.

Many nervous conditions, neurasthenia, mental depression and melancholia, can be imputed to autointoxication. Brokers and professional men, with irregular habits of life, constitute almost a class in themselves. Bolting the food, or excessive eating or drinking, rich food, etc., are factors in the production of hyperacidity, motor insufficiency, dilatation of the stomach, constipation, and autointoxication, with resulting disturbances of the nervous system, and the treatment of the gastrointestinal conditions will rapidly restore the patient's

nervous tone in many cases. Mental depression often accompanies, or is a symptom of, toxemia, and this condition may even progress to depressive insanity. Among other symptoms of autointoxication from the digestive tract, are apathy, insomnia, somnolence, and inability to concentrate the attention. Resulting from the autointoxication of jaundice, we may have all grades, from mental depression to melancholia and insanity. It may cause coma, muscular twitchings, convulsions and death. Stern reports a case of narcolepsy in which, having excluded syphilitic endarteritis, he imputes the condition to autointoxication, resulting from dilatation of the stomach and hyperchlorhydria.

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#### THE TREATMENT OF HEMOPTYSIS.

Hemorrhages from the lung occurring in the course of tuberculosis are divided by Dr. Joseph Walsh (*Georgia Practitioner*) into three classes: (1) From a ruptured vessel in the floor of an ulcer or cavity; (2) as the result of high arterial tension; (3) those occurring in an area of congestion. In the first class of cases all we can do is to prescribe rest, administering if necessary to accomplish this a hypodermic of morphine. Hemorrhage from the second cause practically always responds to small doses of nitroglycerin; this may be given every three hours until the tension lessens, or if the tension is not very high and there is a continual oozing of blood, three times a day as long as necessary. Hemorrhage of the third class is probably the most common. The patient very often presents the symptoms of an acute cold. The arterial tension due to the toxemia of the cold is usually accentuated by the retained excretions due to the use of morphine-containing cough

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For pruritus ani Adler injects into rectum one or two drams of: f. e. hamamelis, dr. 1; ergot, hydrastis and tr. benz. comp., aa dr. 2.

Adler also paints the perianal skin when dry and tough with a solution of silver nit., 960 grains to ounce; then citrine ointment.



mixtures. The indications are plain: open the bowels by repeated doses of magnesium sulphate, and open the peripheral circulation with small repeated doses of nitroglycerin. To lessen arterial tension and prevent congestion the author often adds nitroglycerin to his cough mixture. He has never seen any benefit in these cases from adrenalin, tannic acid, gallic acid, aromatic sulphuric acid, etc.

In the same journal M. M. Saliba says that atropine hypodermically at the beginning of a hemorrhage will often cut it short. Morphine may be given to secure repose and an ice bag applied to the chest. He recommends calcium chloride in 15-grain doses to favor coagulation.



#### PULMONARY HEMORRHAGE.

In a recent number of the *Therapeutic Gazette*, McLaughlin recommends that the chest be strapped in all cases of pulmonary hemorrhage, the idea being to form a clot as speedily as possible. This clot, he thinks, is desirable to keep in place till permanent occlusion of the eroded vessel takes place. Reflex irritability is prevented with the bromides, chloral, etc., and respiratory mobility restricted by the strapping. He gives, upon the appearance of hemoptysis gr. 1-100 glonoin. The straps are applied and the patient placed in the horizontal position on the affected side. The strapping, we think, may prove of benefit—though we would be loth to strap during the hemorrhage. Atropine is, in our opinion, superior to glonoin in such cases and chloral and the bromides we think totally out of the question.



Hartman found that of 48 cases of anal fistula 23 were tuberculous; 5 per cent tuberculous have fistula.—*Lancet-Clinic*.

Zederbaum (*Colorado Med. Journal*) says that "a saline cathartic will check pulmonary hemorrhage more quickly than anything else." Once more we have to register our disagreement: much as we value the saline draught we cannot look upon it as an emergency remedy in hemoptysis. The proverbial "Salt on the tongue" would be even more efficacious.



#### INDICATIONS FOR IPECAC.

In the *Eclectic Medical Gleaner* for July there is an editorial discussion of ipecac, which the author considers a neglected remedy, "even among some specific medicationists." *Irritation* is given as the key for the selection of this remedy. It has at least three fields of operation: (1) To relieve irritation, either in the digestive or bronchopulmonary tracts; (2) to control hemorrhage; and (3) to produce emesis. In any irritative condition of the two above-mentioned mucous tracts this remedy is indicated: irritation of the stomach, bowels, bronchial tubes, air cells, and of the nervous system; irritative diarrhea, bowel troubles with increased secretion. In hypersecretion of the bronchi it should be used in small doses; with diminished secretion in large doses. It is indicated in irritative coughs and in hoarseness from coughs and colds. It is also suggested as a remedy in hemorrhage and especially in menorrhagia. It has recently been reported of value in epilepsy. Eclectics place much value upon tongue appearances. The "ipecac tongue" is long and pointed with reddened tip and edges. A tongue of this kind, with nausea and vomiting, calls for small doses of ipecac.

Have you seen the *Eclectic Medical Gleaner* in its new form? It is now published by the Lloyd Library. Fine appearance.

In following up these indications we suggest that emetine be used to replace the galenical and similar preparations. This is in the interest of accuracy of dosage and scientific prescribing.



#### THE RETURN CIRCULATION.

In the *Medical Council* for July, D. S. Hanson contributes a paper upon the Return Circulation. He refers briefly to the normal circulation and its forces, describes the capillaries as distensible, elastic and probably contractile, and of an immense number. The blood moves through them slowly, the force in the arterioles being about eight times more than in the venules, and diminishing as the heart is neared until in the cavæ it is *nil* or negative.

The vasomotor nerve supply must be comprehended to permit intelligent direction of remedies for the maladies affecting the circulation. Stimulating the cervical cord raises vascular tension by accelerating the heart and increasing vasocontraction; cut the cord under the atlas and vasomotor excitation ceases; but the heart may yet be accelerated, showing that there are other sources of nerve-supply to this vital organ. Vasodilators are more readily stimulated than vasoconstrictors, as seen in shock, etc. (Sajous claims that there are no vasodilator nerves, constriction being due to the ordinary motor nerves and the opponent being simply the contractile force of the capillary walls.) Warmth favors constriction, cold dilation; partly by direct action, partly by irritation of the cutaneous nerve ends. When a dead animal is plunged into water the manometer shows an increase of vascular pressure—a point to be considered in bathing, when



Fine article in *Gleaner* on summer diarrheas. We epitomize some of the remedial indications given.

high and low pressures are increased.

The author gives a description of the vasomotor nervous apparatus; but it must be held in mind that such accounts are not based on anatomic investigations but deduced from studies of functional phenomena.

The circulation may be so influenced through the nerves as to force the blood into the internal organs, by constriction of cutaneous vessels; or be driven from the central receptacles by irritating the constrictors of the splanchnic area. More commonly he thinks the vasodilators are irritated, the small vessels dilated and the blood current retarded so that practically its entire bulk is impounded in the capillaries. The pulse will then be absent in a patient whose heart is normally strong.

On these considerations he bases his vasomotor therapy—adrenalin as the constrictor, glonoin as the dilator; but unfortunately he fails to add that both these are speedy and evanescent in their action, and unfit for the task of sustaining an effect.

*Digitalis* slows the heart, increases the inhibitory diastolic relaxation, energizing systolic contraction and emptying the ventricles more completely. This with the increase of vasoconstriction raises vascular tension, especially in the arteries; the tone being least where most needed. Yet on the whole the effect is beneficial. (This applies to specimens of the drug where digitalin is in excess. It emphasizes our contention that the remedial effect of this drug is to be gauged by its action on the vessels rather than upon the heart.)

*Strophanthus* is less efficient and acts best when the splanchnic area is involved most. If *digitalis*, *strophanthus* and con-

Fever of diarrheas with quick, small pulse and marked irritation; give *aconite* or better *aconitine*.

vallaria are given at once the blood accumulates in the limbs—mostly from the strophanthus.

Sparteine raises and sustains vascular pressure, but acts lowly and is often disappointing, even in chronic low tensions.

Strychnine elevates tension but in too large doses overstimulates and exhausts the irritability of the constrictors, the pressure falling; in moderation it supplements digitalis.

Caffeine acts more upon the higher centers and gray matter, and is less valuable when speedy effects are desired. It is practically worthless in these acute cases.

The nitrites act as dilators directly on the muscular elements of the vessel-walls; relieve cyanosis due to arteriole spasm, when the pulse is stronger and arteries better filled than in vasomotor paresis.

The place of alcohol is still doubtful, and varies in its effects with the dose and the taker. It seems to widen the bloodstreams, but whether by stimulating dilators or relaxing constrictors is uncertain. As uncertain, the author wisely recommends that we employ agents with whose effects we are better acquainted.

Adrenalin is the strongest, speediest and most evanescent of vasoconstrictors. It does not contract the cerebral or the pulmonary vessels, affects those of muscles slightly, the skin markedly, but it is most effective in the splanchnic area. It affects the uterus strongly, the bladder scarcely at all. Sajous attributed the contractions of the heart to adrenalin conveyed to its substance by the *foramina Thebesii*. It induces glycosuria by acting on the liver and pancreas, probably transitory. It requires special apparatus for administration.

Veratrum occasionally useful in diarrhea with full, bounding pulse, fever and restlessness; small dose for vomiting.

Several cases are described. In the first, a dose of quinine was followed by symptoms of vasodilator irritation as above described. A hot bath gave relief promptly—a beautiful example of accurately directed therapy. The second was a child who succumbed to bromoform, proving fatal despite strychnine, digitalin, adrenalin and hot baths.

Third case: puerperal, cyanosed, vasodilation but the pulse fairly good, arterial tension really increased; relieved by glonoin. Fourth case: cyanosis after "headache powders;" pulse fast and weak, respiration labored; recovered under strychnine, rest and warmth. Fifth case: fright, tonic spasm, followed by unconsciousness, cyanosis, low blood pressure; restored by hot bath.

In many convulsions there is vasoconstriction of the surface and vasodilation in the cerebral and splanchnic areas. General vasodilation follows. This also ensues in phenol poisoning, and that from illuminating gas. The ominous forms occurring in the late stages of septic fevers are toxemic, and subacute.

Dr. Hanson sums the treatment as follows: A hot bath for warmth and to increase pressure; digitalis and strychnine hypodermatically in moderate doses; adrenalin 1 to 50,000 intravenously if the condition is vasodilation and not arteriole spasm, the latter requiring glonoin. He concludes with these words:

After all of the therapeutic measures that have been used empirically for ages, consisting mostly of active stimulation with whisky and other drugs, and by not having a definite knowledge of the physiologic action of the measures used often doing harm instead of good, vasodilators being used where pressure was already too low and *vice versa*, no sys-

Ipecacuanha for marked gastrointestinal irritation with nausea or vomiting; narrow tongue, red tip and edges. Emetine.

tem ever has been evolved that would for a moment compare with that here advocated and based on modern physiologic methods. A definite working formula based on reliable data, even when it fails us, leaves the consolation that we have not been working upon uncertain lines and perhaps wrongly, but to the contrary, that we have fully performed our duty and have done the very best possible for our patient.



#### THE PREVENTION OF "FLOODING."

One of our correspondents who asks whether there is any remedy which will prevent "hemorrhage at term" (he having almost lost a woman at prior confinement) opens up a subject too vast and important to be put aside with mere passing attention.

An examination of the recent writings of obstetricians shows that pathological hemorrhages at term are as frequent today as ever—if not more numerous, owing to the less rugged physique of modern mothers—especially to the generally debilitated state of our urban women. The modern accoucheur is, however, infinitely better able to cope with the condition and it may be safely said that where ten women died from this accident twenty-five years ago but one expires today. We know more about the causes of "flooding" than we used to: we are bolder as a class and interfere more rapidly and effectually and, better than all, we "know exact, positive therapeutics better than our predecessors and, instead of only trying to stop the hemorrhage itself when it occurs we now try to prevent it.

But today, as yesterday, we must, from time to time, confront placenta previa (partial or complete): various

diseases of the decidua and placenta may cause alarming hemorrhages, ante-partum or during delivery, and there are, even yet, obscure disorders which cause certain women (who otherwise appear to be perfectly normal) to be "bleeders" when their time comes to be delivered. Traumatism, direct or indirect, may cause the most alarming hemorrhage, at the time or later, and even profound nervous shock may set up this condition. Consideration will show then, that the general practitioner may at any time have to deal with uterine hemorrhages which could not be *prevented* and he must then do the right thing and do it—whatever it may be—promptly. Any good work on obstetrics will tell him (should he lack experience) just what to do in a case of placenta previa and will also suggest some good method of dealing with the other pathological conditions which produce flooding.

To attempt to even touch upon these matters here would be out of the question but there are certain women who would almost assuredly flood during or after labor if left alone who could be saved from this danger by proper medical treatment during gestation. It is of this class we would speak for it is, unfortunately, a fact, that the ordinary text-book entirely ignores the subject.

It is becoming more and more the custom for the doctor to insist upon those women who expect him to deliver them submitting to examination and periodical analyses of urine. As soon as this is a general custom fully fifty per cent of those hemorrhages which now come under the head of "unavoidable" will be "*preventable*" also. Misplaced uteri will be put in their normal position; polypi



Epilobium for dry, parched skin, dry tongue, food partly digested and voided with colicky pain.—*Gleaner*.

Matricaria when unrest and peevishness are prominent with diarrhea; stools green, pain colicky.—*Gleaner*.

will be removed, lacerations repaired and proper surgical procedures instituted to correct duplex vaginae, etc. If marked renal disease exists the pregnancy will be terminated, as it will be also if some pelvic contraction be discovered which totally prohibits normal or safe artificial delivery of a living child.

The existence of placenta previa will then be discovered early and the obstetrician will be prepared to turn and deliver at the right time. Indeed, under such circumstances the appalling accidents which now occur would be few and far between and when they did happen would be more easily dealt with.

Leaving all these instances out of the question there are the hemorrhages due to anemia, debility, atony of the musculature of the uterus, arteriosclerosis, endometritis, that peculiar systemic condition which causes a disturbance of the equilibrium of the utero-placental circulation and "predisposition." The latter term means that the woman "floods" and we don't know why. It is probable that the cause in each such case could be found in the list given, however.

If we have had one experience with a flooding woman and upon careful examination are unable to tell *why* the hemorrhage occurred, we must do our best to put her in such perfect condition physically that such an occurrence would be impossible in the future.

If we know, however, that endometritis exists it becomes our duty to cure that disease prohibiting pregnancy meantime. Fortunately the woman with endometritis does not, often, become pregnant.

But nine times out of ten we shall find that the women who "flood" when it would seem that they should have a

normal delivery, are merely in need of *tonics*—systemic or local. Usually both.

For instance, there is the woman who has hard pains and yet presents a rigid os to the on-coming head. With each pain there may be more or less hemorrhage (open or concealed) and the obstruction may yield only when she faints from loss of blood. Other women begin to flood almost with the first pain; the uterus contracts *unevenly*, expulsive force is absent, and, before the child can be born the mother is nearly exsanguinated. And be it remembered, the outward show of blood may be small while the uterus may be distended with clots. These, together with a torrent of fluid blood, may follow the child; the latter having been really acting as the cork acts in the vial.

We should suspect undue hemorrhage whenever there is pallor, collapse or a thready pulse even though the outward flow is not great. In all such cases it is essential that we know just *why* the hemorrhage occurs and unless we can very promptly remedy the condition we must deliver—even though to do so means rapid dilatation and the use of forceps.

In cases of rigidity of the os accompanied by moderate hemorrhage, the best thing we can do is exhibit atropine to flush the capillaries and relieve the local congestion and then give caulophyllin (gr. 1-3) every fifteen minutes, preferably in *hot* water. Almost the same method may be followed in those cases which present a continuous slight hemorrhage during the last few weeks or days of gestation. To give ergot here is worse than useless but we may with propriety give full doses of calcium chloride to add to the coagulability of



Dioscorea when the bilious element is predominant; skin dry; abdomen contracted; pain constant with paroxysms.

Gelsemium when great restlessness and excited circulation; flushed face, contracted pupil, tendency to cerebral congestion.



the blood; caulophyllin, to act upon the muscular tissue and relieve the atonic condition which facilitates the flow, and collinsonin and hamamelin to sedate irritation and to constrict the vessels. Either of these remedies will act well alone in many cases but here the two should be combined always.

The woman should be kept quiet with elevated hips and an ice bag may be placed over the abdominal region. This should not be used long at a time. Tampons are usually worse than useless. If the flow is prolonged or serious a few full doses of caulophyllin and viburnin should be given, the os dilated and the pains strengthened by the exhibition of quinine (gr. 2-4): if these steps are taken the contractions will be even and vigorous, more nearly resembling the normal pains at full term. The uterus will, too, after being emptied, contract more rapidly and as a result the postpartum hemorrhage which might otherwise be troublesome will be avoided.

But where we can do most in the way of "preventive medicine" is in the case of a known "flooder." These women simply bleed almost to death because the debilitated uterus becomes flaccid and the blood pours, without hindrance, from the wide-open vessels. This bleeding may occur prior too, at, or some time after delivery and the attendant is never easy until at least twelve hours have passed. Many of them are dressed and made comfortable and the physician is about to leave when, without any warning, the gush comes and the woman may be almost exsanguinated before effective steps can be taken to stop the flow.

To such cases the physician will give, for the last eight weeks, aletrin (from

aletris farinosa) caulophyllin and hydrastrin in moderate doses, three times daily, at the same time keeping up full elimination. The woman will then go to term with a normally placed and acting uterus, labor, as a rule, is easy, rapid and comparatively "dry" and contraction takes place almost at once, the placenta being expelled quickly. The subsequent involution proceeds normally and throughout the entire parturition not eight ounces of blood will be lost. It should be remembered that an atonic uterus is often also, a misplaced organ but, if normal innervation and nutrition be set up the supporting muscles hold it (even at term) in exactly the proper place (especially is this the case if fecal deposits have not been allowed to exist in the adjacent bowel) and when labor begins, the contractions, rhythmic and powerful, speedily expel the contents.

In these cases it is generally unwise to knead and squeeze the uterus (practice the Credé method) a gentle rubbing of the fundus being all that is required. As a matter of fact the placenta is usually *separated* within a few minutes, though it then is apt to remain in the inert lower passages. To "pound" and "gouge" a uterus which has really thrown off the placenta is a needless procedure and may cause bleeding from displacement of clots.

It is always wise for the physician to delay the final dressing of the woman (when any fear of hemorrhage is felt) till the child has been washed and dressed. Then the usual procedure should be carried out, care being taken that the uterus or vagina are not filled with clots. If these are present they must be expelled and the uterus should be left well contracted and empty. If



Belladonna or better atropine when dulness or hebetude; child sleeps with eyes open; tendency to congestion.

Asclepias the remedy when the trouble is due to colds and the serous membranes are involved.—*Gleaner*.

a binder is used it must fit well and pressure should be made with a pad over the fundus. If ergotin has not been given it may be with advantage exhibited at this time; many, indeed, make this a routine measure.

Every four hours aletrin, viburnin and macrotin, gr. 1-6 each, (or one Buckley's Uterine Tonic) may be exhibited with the idea of promoting normal involution and preventing the occurrence of after-pains. The third day these may, as a rule, be discontinued and brucine, gr. 1-67, quinine ars., gr. 1-135 and iron ars., gr. 1-67, substituted for their general tonic action. Salines will be the most efficient means of securing a safe and fluid stool.

GEO. H. CANDLER.

Chicago, Ill.



#### JUST THE RIGHT KIND OF A START.

DEAR DOCTOR ABBOTT:—According to your printed matter, letters, energy, push, and go-aheadiveness, I really do not know with what title to greet you. I am reading the CLINIC, and if you look on your books of record you will find such to be the case.

Enclosed please find check for \$25.00, first to pay for CLINIC, then for two pocket ledgers of Monthly Balances, next I would like to have a medicine case, filled with your remedies. I have been using specific tinctures for thirty years, I am not tired of them, but your "clean-up" business just suits me to a "T" and I believe your active principles will, as well.

I claim to be pretty well posted on the specifics, but if you will fill me one

of your best cases with your granules, selecting such remedies as are mostly needed in an every-day practice, and put in a small supply of your saline laxative, please do so at your earliest convenience; should this check be not big enough, send in your bill and it will be paid the same as I agreed to pay for the CLINIC "when I order the next bill or sooner if needed." If the check is too big, just give me credit for it, like you did once before.

This is only a starter. I think your No. 8 case would suit me best, but I cannot take time to select from your list, so I leave this to your honesty, if I go into this I will have to have a dispensing case also and I think you can make your bill accordingly. I don't care for the expense if the stuff does the work and I risk my upper story for guidance in the right direction.

If this letter does not astonish you this time, I will write you one that will next time. Awaiting your early reply I am most obediently and

Fraternally yours,

R. S. H.

—, Neb.

—:o:—

There is a charm about this letter that, though it is purely personal, I cannot refrain from giving it a corner. Here's a good man from Nebraska beginning just right. In the first place he is a therapist—knows a good thing and knows how to use it—and when he switches to give active-principle therapeutics a trial does so generously and trusts me to serve him right as I am glad to and will anyone—money back if not satisfied. We have cases of all sizes and selections to fit.—Ed.



Hamamelis should be used when there is relaxation of tissues with marked tendency to venous stasis.—*Gleaner*.

Bryonia is indicated when there is great tenderness of the abdomen; serous tissues involved.—*Gleaner*.

# AMONG THE BOOKS

*The National Standard Dispensatory*, as a new work of the greatest importance, published by Lea Brothers & Co., is out for sale. We can say no more here at this time. Review will come.

*Operative Surgery*, by Joseph D. Bryant, M. D., is a vast detailed work in all its minutiae, upon which the hopes of reasonable success can be built. To make it fit for the general practitioner the author had this work of two volumes, illustrated with 1,793 figures and many of them in colors. Both volumes comprise 1,527 pages, apart from the extensive, minute and very useful indexes. Besides these latter, the tables of contents of each chapter are very full, giving as it were, a review of the whole of a subject that one may wish to inform himself about as it is up to date. The work is in its fourth edition, well merited and promising not to be emierited for many years to come. Publishers, D. Appleton & Co., New York, 1905. \$10.00 for the two volumes.

*Acute Contagious Diseases*, by Drs. W. M. Welch and J. F. Schamberg, is a most important and an always needed book of reliable data on those contagious diseases of which the authors treat. The opportunities which the authors have had for many years in prosecuting the investigation of acute contagious diseases in their hygienic, sanitary, prophylactic, clinical and therapeutic bearings, equal their well-known scientific zeal and sound judgment as embodied in the book before us. The book is principally devoted to smallpox, diphtheria, and scarlet fever, and also to measles, rub-

eola, and typhus fever. It is illustrated with 109 engravings and 61 full page plates, which do illustrate. No physician, whether he is connected with public sanitation officially or not, can afford to be ignorant of this book. Publishers, Lea Bros. & Co., Philadelphia, 1905. \$5.00.

*Surgical Diagnosis*, by Dr. O. G. T. Kiliani, is designed as a Manual for Practitioners of Medicine and Surgery. It is illustrated by fifty-nine full page plates and by engravings in the text.

When a general practitioner begins to surmise that a certain case of his will have to be treated surgically, he ought to examine it more especially with reference to that interference. And for that purpose the book offers valuable service. There are not many such monographs in existence in the English language, and this manual will supply this real want to a large extent. Publishers, Wm. Wood & Co., New York, N. Y., 1905. \$4.50.

Of *Cohen's System of Physiologic Therapeutics*, we have before us the concluding volume, XI, treating of Sero-therapy. Organotherapy, Blood-letting, Radium, Thorium and Radioactivity, Counterirritation, External Applications, and an outline of the principles of therapeutics with special reference to physiologic therapeutics, an addendum on x-ray therapy, and an index digest of the complete system of the eleven volumes.

At this, his last review of the concluding volume, the writer, who had the pleasure and profit of reviewing all the preceding volumes, feels as if standing

at the completion of a monumental edifice erected for the edification of future generations. The name of the work is unsatisfactory, because it embodies neither its special character, nor its wide extent. Yet the profession will know the work not by that name, but by its merits. Apart from its therapeutic help, the work is an instructive rebuke to all the howling crowd of so-called naturopaths, and ignorant antimedicine fanatics. It ought to show them how much more there is to be learned in an apharmic therapy than in a pharmic. They may then, perhaps, turn to be rather "herb doctors." The invaluable additions which the work makes to the medical armamentarium together with the advancing prevalence of alkaloidal therapy ought to give to rational medicine a triumph overcoming the irrational, pious and impious antimedicine fanatics who afflict the present generation. Publishers, P. Blakiston's Son & Company, Philadelphia, 1905. The whole work costs \$27.50, and the volumes are, we regret to say, not sold separately.

*The Waters Above the Firmament*, by Isaac N. Vail, is a book, now in a second and revised edition, containing startling ideas in cosmogony, which none but a practical, working scientist, a bold, courageous and original thinker who is in search of truth and is willing to embrace it wherever he finds it, could conceive, nay more, and be willing to give it to the world. Much as the doctrines of geology seem to be established, our age of Interrogation and Revision is dissatisfied with them. And much as the Biblical and other recorded accounts of the Creation and the Flood are disbelieved by scientists of our age, there are

yet some of them who do believe in them on scientific grounds. One of these latter is I. N. Vail. He seems to prove that our world in its æonic cooling from a fiery globe to its present state was surrounded by vapory rings and canopies, which in their ultimate successive breakings down deposited the minerals in and the oceans on it. Many other cosmogonic problems the book seems to solve satisfactorily. It will very well repay any thinking person to read it carefully. Publishers, Ferris & Leach, Philadelphia, Pa. \$2.50. See advertising page 65.

We have many manuals for nursing and nurses, but we plead for a place for *A Hand Book of Nursing*, in its revised edition of 1905, published by the J. B. Lippincott Company, Philadelphia, \$1.00. It is one of the oldest of its kind having had its first edition in 1878, and has accumulated wisdom with age. It is simple in language, direct in directions, unassuming and yet efficient. Altogether a very recommendable book, especially for family nurses who learned this art in hospitals.

*Merck's 1905 Manual of the Materia Medica* is what it professes, viz., A Ready Reference Pocket Book for the Physician and Surgeon. It comprises: Materia Medica in actual use; Therapeutic Indications, Classification of Medicaments, and Miscellany. Price is not given, we suppose because priceless. It is the most convenient, compact *multum in parvo* we know of. Write for it to Merck & Co., University Place, New York City, and you will thank them and the writer of this.

Baptisia:—Purplish tongue; dark sanious or prune-juice stools with shreds; tendency to sepsis.—*Gleaner*.

Nux vomica (strychnine better) should be given in the atonic cases; expressionless mouth and pallid tongue.

# CONDENSED QUERIES ANSWERED

## PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

## ANSWERS TO QUERIES.

ANSWER TO QUERY 4773:—In the July CLINIC I notice Query 4773 together with your answer. Will you permit me to quote my experience with resorts of the Southwest? New Mexico, as you suggest, is excellent in some sections. Arizona is also justly famed a rendezvous for tubercular subjects but one must be careful regarding two points: (1) Water supply; (2) elevation. Phoenix, for instance, is a Mecca for consumptives, but the water is highly charged with calcium salts; and repugnant to the taste. Again it is but one thousand feet high and during the summer the days are very hot, the mercury having touched 120° F. this summer.

This place, Wickenburg, I have found to be an exceptional spot. Statistics prove that 310 to 320 days a year are clear, with sunshine during all the possible hours. The elevation is 2,000 feet—just right—not too stimulating nor rare. Days are pleasant; when warm, the air is very dry, while inducing free diaphoresis the sweat passes off in insensible perspiration. The nights are cool, requiring a comfort. Everybody, even the old residents, sleep out of doors. And now comes the all important point, water; it is abundant, being drawn by

an artesian well from a considerable depth. It is, moreover, pure, pleasing to the palate, and chemically right.

Good meals are readily procurable and a new modern hotel is now nearing completion. In regard to tent colonies, I can but say that if a doctor has plenty of capital and is well connected with prominent physicians with large cities, it will pay; but be prepared to spend \$100 on each tent fitted out for a consumptive to live in. A tent must be of good material, scientifically built and adequately furnished.

To any member of our fraternity desiring information, I will be glad to reply to letters if postage is enclosed.

C. H. WILSON LEVENGOOD,  
Wickenburg, Ariz.

ANSWER TO QUERY:—In the case of intussusception in the June number you almost advise the use of kerosene. Try it, it will do no harm; besides it is one of the finest treatments for such troubles I have ever used. Have used as much as a gallon at one time, putting the patient on an incline, head down.

PERRY BURGIN.

McIntosh, Fla.

## QUERIES.

QUERY 4828:—"Slowly Growing Neoplasm." I have a case I would like to describe to you and see if you can help me any. An old gentleman, now eighty-one years old, about forty years ago was vaccinated by a physician; some ten years after vaccination he noticed a

small, black speck in the center of the scar about the size of a pinhead. This itched some and the patient would scratch it and the scab would disappear and a new one come in its place. Some twelve years ago at the site of the scar there came a growth, purplish in



color, but he reduced its size down to almost nothing with corrosive sublimate in solution, but here a short time ago it reappeared and one day in getting into the corn crib he bruised it against the door, making it bleed. Since this it has never healed over but has gradually increased until now it is about three-fourths of an inch in height from the skin of the right arm, about three inches in diameter, purplish red in color with a little inflammation in the surrounding tissue. It has not been sore or pained him any until yesterday when he had sharp, lancinating pain through it. It runs a watery serum. I have been treating him for about a month with no improvement in the sore. My treatment has been mostly local for this reason: the patient is what you might call a patent-medicine crank and has an iodiosyncrasy against drugs, about half an adult dose being all he can stand. He is about five feet ten, will weigh about one hundred and sixty pounds and is in fairly good health except dyspepsia and a valvular derangement of the heart. My treatment has been internally for the dyspepsia: bismuth subnitrate, five grains, lactopeptine, five grains, calomel 1-10 grain, one powder four or five times per day. For heart complication a tablet trituration composed of digitalis, belladonna and nitroglycerin. He uses himself quite a good deal of Ayers' sarsaparilla and Jayne's sanitary pills. He does not use tobacco in any form and coffee moderately. Has had a very good appetite until the last month. His father lived until he was fifty-four years old and died of dropsy of the heart. Mother lived to eighty odd years and died of cancer. For local application to sore I first used after washing in carbolized water, ichthyol ointment, then benz. oxide of zinc ointment and now am using campho-phenique for dressing. The axillary glands are all implicated, being a hard mass. The sore is superficial but looks to me as if cancerous, but I have never told him so. From what I have told you, kindly give

me your idea of the growth and the treatment you would pursue. Have used the alkaloids in practice and like them very well. I intend to use more as soon as I can readily work into them.

G. H. B., Missouri.

There is little question that the growth is of a cancerous nature and we advise you to take out a specimen of the tissue from the periphery, and send it to our laboratory for microscopical test. If it is what we fear, the sooner you know it the better. In the meantime give that man echinacea and arsenic iodide in full doses. This is a case in which nuclein with its marked vito-incitant properties will be of service. Give it hypodermically if you can, ten drops twice a day. If this is not feasible give a like quantity by the mouth, three times daily. Locally apply gauze soaked in equal parts of sp. tr. echinacea and aqueous thuja. It may be that an arsenical paste followed by antiseptic osmotic pastes with the above medication later might help, but the age of the patient and the character of the sore are against you.—Ed.

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QUERY 4829:—"Recurring Paralysis." Five years ago, Feb., 1905, I retired in apparently perfect health, awoke about 12 o'clock and thinking the fire needed replenishing I arose, went to the fireplace, and in trying to lift the coal scuttle I discovered that my right arm and right leg were in a condition of partial paralysis; returning to bed, in my endeavor to awaken my wife, I found my tongue also partially paralysed. This condition remained for only a short while. Within a few hours after the attack I had several of the best physicians with me. They all pronounced variously upon the case and prescribed as variously. Twelve months following I had another similar attack, and since then, during each

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Magnesium sulphate when tormina and tenesmus and mucous or mucosanguineous passages.—*Gleaner*.

Podophyllin when undigested food retained; curdy passages, flecked with green, with tenesmus and musty odor.

twelve months, I have had another attack, only of a slighter character. On the 11th of last September I had another and my last attack. At my first attack I weighed 185 pounds; lost 45 pounds and now weigh probably 155 pounds; my appetite has constantly been good, digestion excellent, my sleep profound and refreshing, bowels regular, urine normal. At present my vocal cords do not approximate, rendering my speech very indifferent in character. Both my right and left hands have a feeling of stiffness, no loss of mobility or sensation. I am oppressed with a constant fear of another and perhaps fatal attack. My heart is dicrotic and my nerves are completely broken down.

D. H. T., Texas.

We should very much like to examine you thoroughly and really do not feel that we can do justice to the case without examination. However, we suggest one lecithin tablet every three hours and morning and night absorb ten drops of nuclein solution from the buccal mucosa; or, better still, take it hypodermically; strychnine and phosphorus, one granule; avenin, six taken with a few mouthfuls of hot water every four hours, morning, noon and night, that is to say, just prior to eating. You can also take a dose of avenin (six granules) with two ounces of very hot water the last thing on retiring. At least twice a week half-hourly for three doses from seven p. m. take podophyllin, gr. 1-6, leptandrin, gr. 1-6, and calomel, gr. 1-6. Sodium phosphate one dram in hot water the next morning before breakfast. The idea here is of course to furnish reconstructive material for the debilitated nerves with lecithin and nuclein. Avenin has, many times, given pronounced results in such cases and the action of strychnine and phosphorus is too well understood to

need description. In order to render the liver active and the intestinal canal absorptive and as nearly normal as possible, we suggest the hepatic alternatives followed by sodium phosphate.—Ed.

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QUERY 4830:—"Systemic Gonorrheal Toxemia." L. K., twenty-eight years old, Polish, single, five feet three inches high, weight 114 pounds. Father's family sickly, father's mother hysteric, father inebriate, mother healthy. Up to fifteen years of age suffered with some chronic eye disease. From ten to fifteen years of age he was very poorly nourished on account of poverty. At fifteen he left home and up to twenty-two years of age he was again very poorly nourished. In England he sometimes went three or four days without any food. At twenty-two he earned more money, ate regular meals, but got sick in bed for several days. Since that time he has suffered from constipation. For five years, from seventeen to twenty-two years of age he masturbated. At twenty-two, at his first intercourse, he contracted gonorrhea. Present symptoms: For last two or three years he has suffered from debility, chills (normal temperature), constipation for a few days, then diarrhea; sleepy, despondency; threads in urine, spermatorrhea. Examination of the urine six months ago showed pus in large quantity, bladder, epithelium and a few gonococci. No improvement in six month's treatment. Diet: no meat. Irrigation of bladder with 1 to 1,000 nitrate of silver, hydrotherapy, massage, all kinds of medicine for gastroenteritis and chronic cystitis and urethritis. Please help.

P. K., Illinois.

In what condition are the prostate and seminal vesicles? Palpate through the rectal wall and note any enlargement or undue induration of the vesicles. There may be an involvement of the bladder (gonorrheal cystitis), ischiorectal ab-

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Sodium sulphite is the remedy to be used when there is a broad, pallid, dirty tongue.  
—*Eclectic Med. Gleaner.*

Copper arsenite for gastric irritation with colicky pain; full, gushing, colorless stools; cramps in limbs.

sciss with sinus leading into bladder or urethra, or pyelonephritis, infection having spread by way of the bladder and ureters to pelvis of kidney. The chills evidence absorption of toxins. The urethra must be examined carefully for hyperesthetic areas and the whole pelvic contents should be gone over minutely. Test the urine by the two glass method and see whether gonococci are present in second glass. The diarrhea evidences catarrhal involvement of mucosa. The patient should be put on calcium sulphide, gr. 1-6 every hour while awake for three days—adding echinacea one to every other dose; to counteract the systemic dyscrasia, the bladder should be irrigated with a weak  $H_2O_2$  solution followed by a 1 to 1,000 antinosine solution. Bowel irrigated with a weak ichthyol solution. Before each meal give one of the digestive granules, after food (as a general tonic), triple arsenates with nuclein, two granules, and, one hour later, ten grains of the sulphocarbates. This on general principles. As soon as we are in possession of more precise clinical data we will prescribe more definitely.—Ed.

QUERY 4831:—"Extreme Alkalinity of Urine." I have a case of a woman of forty-five upon whom I did a vesico-vaginal operation, and for stone in bladder, in February. She has recovered from the effects of operation but the urine is so alkaline that it turns the external genitals white as if you had poured carbolic acid on them. Please give me some information on the subject.

H. P. U., North Carolina.

We suggest that you give this woman one to two grains of ammonium benzoate together with a glass of barley water flavored with a little lemon juice

every three hours. Smear the external genitalia with carbolized vaseline. Remember that the more fluid you give during the twenty-four hours the better for the case. You may also give with advantage one or two drams of a good preparation of *triticum repens* with the ammonium benzoate. *Tritica* (Searle and Hereth) is the best preparation we have yet been able to find.—Ed.

QUERY 4832:—"Treatment of Varicose Ulcers." Kindly give me your most successful treatment for varicose ulcers. I have employed almost everything in the way of local applications, including local feeding with bovine and skin grafting. Some cases yielded to treatment, some did not.

E. J. B., Indiana.

We have been quite successful with ulcers of the varicose type, giving internally ergotin and hydrastin two each three times a day after a primary cleaning out of the system with calomel, iridin and juglandin, of each gr. 1-6 half hourly for four doses at night, and bilein the next morning before eating. This medication is repeated *every other night*. Dosimetric trinity, two, morning and night, and juglandin, quassin and strychnine arsenate before meals. Locally cleanse the ulcers with  $H_2O_2$  pure, flush with aq. cinnamoni and then dry thoroughly. Curette, clip or scrape away any dead tissue and then apply turpentine (Merck) on one thickness of gauze, seeing to it that every portion of the ulcer is covered. Cover with gauze and bandage *snugly*. Repeat till granulations are well advanced, then graft and feed the grafts with bovine as per the technic in the CLINIC. Have the patient wear an Empire bandage and

Hare recommends for tubercular night sweats, when other remedies have failed, pilocarpine, gr. 1-60 to 1-30.

For tubercular night sweats Thornton gives piperidin guaiacolate in capsules, gr. 5 to 20, an hour before expected sweat.

massage the limb every night with olive oil. In some cases ichthyol will do excellent work, and after a thorough cleaning, the following ointment will do wonders: ichthyol, dr.  $\frac{1}{2}$ ; balsam Peru, dr.  $\frac{1}{2}$ ; boric acid, gr. 30; zinc oxide, gr. 30; vaseline, one ounce; lanoline, one ounce. The painful ulcer may be painted with a solution of cocaine first.—ED.



QUERY 4833:—"Charging for Medicines." I would like you to inform me how I should fix my charges for medicines furnished to patients? Sometimes this is an item of importance; also the best and most satisfactory way to all concerned of declining to respond to calls for genuine "dead beats." I mean the "real article" who deserve to be "turned down."

W. A. M., Minnesota.

As to the matter of charging for medicines, never do it, excepting when you are going to give an extra lot for a special purpose, or to last for a long time; then charge roundly. For ordinary prescriptions, costing from one to five cents, make no charge whatever but charge well for your professional services.

The only way I know to turn down a dead beat is to turn him down. Don't dodge or fabricate. Just meet the issue squarely once for all and stick to it. The sick poor, though abundant, should be cared for. Of the genuine, never-mean-to-pay dead beat there are few and the number may be made less by careful, wise handling.

No, I do not think your card at all unprofessional, not in the least.—ED.



QUERY 4834:—"Spastic Paraplegia." Male, age thirty-eight, at the age of three years had hip-joint disease. The



Tyson advises in cases of melena neonatorum absolute rest with head low, feeding with teaspoon and ergotin hypodermically.

hip, knee and ankle of right leg are ankylosed (have been for years). The patient has been in Louisville from January to May under treatment by an osteopath for curvature of spine. After a treatment on April 14, while walking down a street he lost the use of both limbs and fell. After a short time with some assistance he got on a car and went to his lodging house. The next morning he got up as usual and went into the bath room to attend to his toilet. While there he fell and since then he has had no use whatever of his limbs and has had the spastic condition since then. Both legs are affected, there is loss of sensation and the sphincters are involved. At times he cannot pass his urine and feces on account of spasm of sphincters. Reflexes are greatly exaggerated. Previous to the paraplegia there was some pain in lumbar and sacral regions. Spasms at times are very violent and painful and he cannot sleep on account of spasm. Slightly anemic, appetite good. No history of syphilis. Between my first and second visits there has been a return of sensations and some voluntary motion, but very slight. What I want to do is to relieve the spasm. I think that is all that can be done for the patient. If you can help me out in this case I will greatly appreciate it. I have about decided to adopt the alkaloidal method of practice. There is no argument against it.

G. A. B., Kentucky.

This is, we fear, unquestionably an incurable case and is due to changes in the spinal cord or thrombus or embolism. The affection of the sphincter muscles is a bad sign. However, Doctor, you cannot do better than give as an alternative tonic the triple arsenates with nuclein (two after each meal) with phosphorus one granule and lecithin one tablet three times a day between meals. Avenin, four granules, scutellarin, three, and capsicin, one, morning and night with

In intestinal colic you can move the abdominal wall over the intestinal mass; in peritonitis it is rigid.—*Int. Jour. of Surg.*

a little hot water. The two former are "nervines" and capsicin stimulates. The galvanic current or static breeze should be applied two or three times a week; massage and friction with the hand and olive oil over the base of the spine and over the bowels daily. Keep the bowels freely open with saline, giving a teaspoonful every morning in a glass of hot water. Let us have a specimen of urine—four ounces from the total amount passed in twenty-four hours, at the same time stating the amount passed during that time, and if we find anything there of interest we will report and make additions to treatment or changes as may be necessary.—Ed.

QUERY 4835:—"Acne." I have a patient twenty-five years of age who has had acne since she was fourteen—about the time she began menstruating. Her digestion is fairly good, suffers some with flatulence, a little constipated. Has been a teacher in a female college since she finished school. Condition aside from facts mentioned seems real good.

C. S. N., Alabama.

Wash the face with tincture of green soap, and clean off with warm boric acid solution. With an acne lance open the pustules and with the ring express contents; after cleaning out eight or ten, inject with a blunt-pointed hypodermic needle a drop of hydrogen peroxide. Rewash the face with boric acid solution and with a toothpick dipped in carbolic acid, swab out each cavity, neutralize with alcohol and you will never have another spot in that area, nor will you have scars. Apply at night an ointment of ichthyol, one dram; salicylic acid, one-half dram; resorcin, thirty grains; ung. simp., one ounce; vaseline

(white), one ounce. This should be washed off in the morning with hot water and the face then dusted with dolomol-ichthyol powder. Internally give calomel, podophyllin and leptandrin of each 1-6 grain half hourly for four doses every third night followed by saline the next morning. Continue this treatment for two weeks. Every three hours xanthoxylin, chimaphilin and rumicin two. After each meal the sulphur compound granule, three or four for one week, and the next week arsenic sulphide, one, returning to the sulphur compound for the third week. Baths twice a week, preferably salt followed by an alcohol rub, and brisk friction with a rough towel. Diet carefully; fruits, fish, lean meats and vegetables. No fats, starches, sweets or indigestible material. This treatment modified to suit conditions will cure every case of acne in two months or sooner. In the *American Journal of Dermatology* for June the writer has an article upon Acne and Its Treatment. You should read it.—Ed.

QUERY 4836:—"Pelvic Trouble." A woman fifty years of age through with menopause five years ago with no unusual trouble. She has borne two children. All her married life she has been troubled with severe inflammation of uterus and ovaries after walking or being on her feet any length of time, and two years ago she was suffering so intensely she consulted one of Boston's best specialists, who told her she had a "mass" in Douglas' cul-de-sac. He was unable to tell its exact nature but ordered tampons of glycerin. After a month's time she visited him again. He said the "mass" was not nearly as large but he should say it was a fibroid tumor. She

For intestinal hemorrhage Butler recommends tannin and sulphuric acid. Better use glonoïn, strychnine and hyoscyamine.

In night sweats due to weakness Coston gives camphoric acid, gr. 20 to 30 dry on the tongue, an hour before expected sweat.



uses tampons continually, is quite comfortable until she exerts herself when she suffers very much, but the pain is not confined to one spot; sometimes it is low down in the pelvis, at others; in the groin and back and in the cul-de-sac. She cannot ride at all, as the jar gives her all this suffering, not at the time however, but the following days; it seems like inflammation. What she insists upon my helping her in, above all else, is a very bad breath, which she has had for years. Her mouth tastes bitter and vile in the morning and a good deal of the time. Her bowels she keeps well open with a pint of hot water which she drinks every morning. She has a very irregular heart, it will skip every other beat for a number of beats, then ninety, fifty or sixty all right. This has been so for three years, after a shock to the mind. She is conscious of every beat or miss. Pulse quick and full. I think this is a hard one for a young doctor. I do not feel like giving calcium iodized, fearing its action, as for years she painted back and groin with iodine until it brought out a rash which she has never gotten entirely rid of. Calls it iodine poisoning.

R. W. C., Man.,

The only way to treat this woman intelligently is to make a thorough examination and determine the exact trouble. There is undoubtedly some pelvic trouble, though it is impossible to tell what it is from your description. Evidently the digestive apparatus is in a bad condition and it is highly probable that there is fecal accumulation in spite of the fact that she reports her bowels "well open," and that this adds to the pelvic congestion. The indications for pelvic drainage are plain. Clean out thoroughly with repeated small doses of calomel, podophyllin and leptandrin and every morning give a saline in hot water the first thing on rising. To be sure

that the rectal sac is empty give enema, using the long tube. Do this thoroughly. Be sure the lower bowel is empty. Deplete through the vagina with ichthyol-glycerin wool tampons. Apply these yourself, and order *hot* vaginal injections every night, a gallon or more of water allowed to run in and out slowly while the patient is in a recumbent position. Twice a week apply euarol to the endometrium. Internally let her take the uterine tonic. Meanwhile find out whether this is a fibroid, or a chronic inflammation of the body or lining of the uterus, or a retroversion, or a cellulitic abscess, and then you will be prepared to give the local treatment most appropriate.—Ed.

QUERY 4837:—"An Interesting Obstetric Case," "Synovitis." I had a unique experience this week. Tuesday noon I was called to a confinement in a Polish family, both parents under five feet high. They said the water broke in the morning, and back pains all day. Abdomen very large and hard as a board. I had delivered the woman of twins four years ago, and diagnosed the same again. I left with instructions to call me when pains became hard. I called again at six and at the same time was called to a neighbor of theirs. I went to the first case, and at ten o'clock delivered one child with forceps. As no pains followed, I walked over to the neighbors while she rested, and delivered a small boy there. Then I returned to the first case and as there was no sign of pains, "went up" and found another child with sack entire, which I delivered by the feet. Both placentas were adherent and I had considerable difficulty in loosening one of them.

Here is a case for diagnosis and treatment. Woman about forty, large and

If this fails Jackson says to apply diachylon ointment on linen twice daily for a week without washing; scales and new skin forms.

Sweating Feet: Fox says: Wear socks soaked and dried in boric acid; powder with salicylic, 3 parts, starch, 10, talcum, 87 parts.

robust looking, mother of one child seventeen or eighteen years of age. About eighteen years ago she had a swelling in the right knee, which was thought at the time to be rheumatism. It would come at intervals of some months apart; in cold weather it would be very tender, but not very sore in warm weather. She has taken all kinds of treatment and at one time got rid of it for two years, and then it returned in the left knee. The periods have shortened two weeks now, and she can tell the exact day that it is going to swell. It reaches its maximum in two days, and gradually goes down in three or four days. The greatest tenderness is right at the kneecap, but pain sometimes extends up the thigh. The patient has "heart spells," faintness with palpitation, bowels moved every day with laxatives, urine rather small in amount, but normal. Advice thankfully received. I cleaned out bowels and gave sulphocarbolates with diuretics, and last attack was not so bad as previous ones.

W. McB., Michigan.

Thank you for the report of that obstetrical experience. You certainly had a busy evening's work and ought to apply for a medal from Roosevelt. No "race suicide" in your vicinity, we imagine!

As regards the knee, it is a question whether this is a synovitis proper, a "floating tendon" or really a recurrent rheumatic condition. We would paint that knee with iodine daily and apply an elastic bandage snugly. At the same time we would give internally apocynin one, Cushman's rheumatic combination (aconitine, colchicine, strychnine and macrotin), one every two hours for one day, then t. i. d., giving the night prior calomel, gr. 1-6, podophyllin, gr. 1-16, and leptandrin, gr. 1-6, half hourly for four doses to stimulate hepatic action.

Saline, a teaspoonful every morning in a glass of hot water as an eliminant and the first thing on awakening, cactin one granule, and dosimetric trinity two, the object here being to maintain an equal circulation. You do not tell us whether there is any effusion in the joint. If iodine does not do the work try ichthyol and lanoline externally and rub the entire limb twice a day with a concentrated solution of epsom salt, using considerable friction.—ED.

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QUERY 4838:—"Uterine Hemorrhage in Octogenarian." Woman of eighty years. No cancer; no tumor; subject to frequent hemorrhages of uterus and appendages. Ergot produces only temporary effect. Suggest what you think needed. I have thought of hydrastinine and calcium chloride.

A. T. B., Illinois.

Are you quite positive—that there is no cancerous affection? Hemorrhages from the uterus in a woman of eighty are very suspicious. Give hydrastin one and calcium iodized one every four hours and if there is the slightest sign of a flow after forty-eight hours give atropine, gr. 1-1300 or 1-1250 promptly, and follow with hydrastinine one granule hourly until relief. It may take full dosage to do the work, and after you have stopped the flow, give the hydrastinine every four hours for a day or two to make sure of things. Better look over that uterus pretty well, Doctor. You might give calcium chloride in fairly large doses and you might also feed her on gelatinous foods, but we feel sure you will find something local which needs remedying. This looks like a case for the surgeon.—ED.

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Seborrhea Sicca: Jackson removes crusts with oil and applies sulphur ointment, dram to the ounce, every night for a week.

The sulphur treatment is followed by washing the hair with soap and water; then use sulphur ointment every other night.